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ABSTRACT

In New Zealand, secondary schools, polytechnics, and universities are the main educational institutions undertaking further education and training of the labor force. In recent years, the two major strands--trades and technical education and general academic studies at the university--have gradually been supplemented by a range of transitional education and labor market training programs. A more varied pattern of provision has evolved with separate arrangements for funding and certification and different accountability structures for training providers. Pressures for the reform of the postcompulsory education and training system need to be understood within the context of changes in New Zealand related to economic and structural changes, technological changes, changes in the work force, unemployment, and a more complex transition from school to work. Reform of the current system has been advocated on a number of grounds, such as the quantity and quality of training, problems of access and equity, and administration and funding of further education and training. The concept of a "market" for further education and training can be defined by examining the factors that influence the supply and demand for training and the factors that are likely to influence the investment decision by individuals and firms. The government has a role in the funding and certification. (Appendixes include 11 pages of data tables and a list of 13 references.) (YLB)

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FURTHER EDUCATION AND TRAINING OF THE LABOUR FORCE

COUNTRY REPORT - NEW ZEALAND

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Paris 1990

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FURTHER EDUCATION AND TRAINING OF THE LABOUR FORCE

Country Report : NEW ZEALAND

Following the OECD Intergovernmental Conference on Education and the Economy in a Changing Society held in Paris in March 1988, the Organisation -- on the recommendation of its Education Committee and its Manpower and Social Affairs Committee -- initiated new work on the Further Education and Training of the Labour Force.

As part of that new work, a number of Member countries agreed to prepare reports, according to a framework prepared by the Secretariat, that would provide for each of the countries concerned an overview of policies, practices, and institutional arrangements regarding the provision of and participation in further education and training of the labour force. The information made available in these country reports, together with other relevant material, will be brought together in a general report on the subject to be prepared by the Secretariat.

This is the report submitted by the Department of Labor in New Zealand.

The Secretary-General of the OECD has agreed to make the report publicly available on his own responsibility.

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NEW ZEALAND NATIONAL REPORT

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SECTION 1

OVERVIEW

This report examines aspects of further education and training from a New Zealand perspective. It is compiled at a time of considerable debate and change in the education and training sector and the structure of the report reflects that context.

The report considers the education and training for the whole of the working age population, rather than concentrating on a strict labour force definition. This may be considered to be more appropriate given the variation in participation rates that can and do occur over quite short time periods.

As a concept education and training for the working age population (or post-compulsory sector as it is commonly known in New Zealand) has only come together in any unified sense over the last few years. Until then analysis, review and policy development tended to be conducted within specific areas of the post-compulsory sector such as further schooling, polytechnics, university, apprenticeship, labour market training programmes and industry training.

The New Zealand Labour Government at the beginning of the second term of office in 1987 indicated its desire to bring together policy development for these various areas and to develop a comprehensive framework for a new and simplified system of post-compulsory education and training. Support for change and innovation was high on the political agenda.

Consequently in early 1988 the Government contracted a Working Group headed by Professor Gary Hawke, Director of the Institute of Policy Studies at Victoria University Wellington, to bring together the various recent reviews that already existed and to present a comprehensive framework for a national system of post compulsory education and training (PCET) which addressed the fundamental issues of:

- the role of post-compulsory education and training in the social and economic life of New Zealand
- how to increase the provision of post-compulsory education and training, while fairly apportioning the cost
- the role of central government in the sector

- the need for greater equity, both in terms of access to post-compulsory education and training and in terms of the way it is delivered to all those wishing to participate

- the need for efficient and effective delivery mechanisms

- the establishment of more appropriate management structures

- the development of national certification arrangements

Arising from the report of that Working Group, which was made publicly available for comment, consultation and submission, the New Zealand Government has taken a number of significant decisions to reshape education and training beyond the age of fifteen. Those decisions were publicly outlined in principle in February 1989, in a Government document entitled Learning for Life, and further developed in Learning for Life Two in August 1989.

The presentation of this national report is therefore in the context of the significant change which is currently taking place in the post compulsory education and training sector in New Zealand.

Section 2 of this report gives a landscape picture of education and training and patterns of utilisation prior to the initiation of 1989 reforms. Section 3 examines the factors lying behind the provision of and participation in education and training leading to the thrust for reform. Section 4 examines issues related to the development of a "market" for further education and training and indicates the current New Zealand approach to some of these issues.

SECTION 2

LANDSCAPE

Introduction

All learning experiences which assist people to attain the necessary skills, knowledge and experience for working life may be regarded as education and training for the labour force, from structured learning on-the-job through to advanced courses conducted in higher educational institutions.

The above definition embraces `training' which is vocationally specific as well as 'education' programmes which provide generalist skills which are not necessarily directly relevant to the labour market. From a labour market perspective, however, courses which are directed towards employees, the unemployed and people about to enter the labour market are clearly of greater interest.

Post-school education and training of the labour force takes place in a variety of settings. In New Zealand, secondary schools, polytechnics and universities are the main educational institutions undertaking further education and training of the labour force.

This section outlines the main forms of provision of PCET in New Zealand for the working-age population. These arrangements are those which were in place before the 1989 reforms in the post-compulsory sector.

Enrolment and expenditure statistics for the post compulsory education sector are set out in Annex 1.

Annex 2 gives a description of existing labour market training programmes.

SECONDARY SCHOOLS

As at 1 July 1987 there were 314 state secondary schools and 20 private secondary schools.

The secondary school system aims to provide a broad balanced education which equips young people with a range of general, personal, social and intellectual skills so that they are well prepared for adult life. There is a general curriculum to the age of fifteen, but beyond this schools may offer local courses in addition to nationally approved courses.

In recent years there have been changes in senior secondary schools, including the abolition of the University Entrance Examination, the introduction of single subject passes within the school certificate

system, and a general expansion of the senior school curriculum to accommodate a greater range of subjects and allow opportunities for multi-level study.

There has also been a growth in transition programmes to assist upper secondary school students to explore different options before making decisions on subsequent training or employment. Such programmes may include orientation visits to tertiary institutions, part-time attendance at courses conducted at polytechnics through the LINK Scheme, career counselling, and work exploration schemes which make it possible for students to sample a range of job situations.

The emergence of transition programmes and increasing choice in subject areas also reflects the fact that the secondary school now serves a wider student population than it did in the past, including those who do not wish to pursue academic studies at university.

The upper secondary school still caters predominantly for young people, although some adult returnees who wish to gain or upgrade their secondary school qualifications are also on secondary school rolls. The New Zealand Correspondence School also provides an avenue for 'second chance' education for adults. Over 70 percent of correspondence school enrolments are for adults. Of these, three quarters are enrolments by women.

Many schools also offer part-time evening classes for adults, which are predominantly for recreation and hobby purposes. In 1987 evening classes were offered by over 250 schools, mostly in secondary schools.

Retention Rates

Up until the early 1980s, fewer than half of secondary school students remained in school to a sixth form year. Of those students who remained to form six, fewer than 1 in 3 chose to spend a further year in school to the seventh form.

From the 1980s growing youth unemployment and changes in the upper secondary school resulted in a rise in the proportion of students remaining at secondary school beyond the school leaving age. Between 1980 and 1987 the percent of the third form entry cohort retained to the seventh form increased from 15 to 24 percent of the entry cohort.

Research undertaken by the Department of Education (Pole, 1988) indicates that there are significant differences in Maori and non-Maori retention rates (see Table 1). Moreover, because the proportion of non-Maori students remaining at school has increased at a faster rate than that for Maori students, the differential between the Maori and non-Maori rates has widened from a difference of 13 percent in 1980 to 20 percent by 1987.

TABLE 1

MAORI AND NON-MAORI RATES OF RETENTION TO FORM 7
PERCENT OF FORM 3 ENTRY COHORT RETAINED TO FORM 7

	Maori	Non-Maori	Difference
1975	1.9	14.5	12.6
1980	3.6	16.5	12.9
1985	4.4	19.7	15.3
1987	6.9	26.8	19.9

Source: Research and Statistics Division (1988)
NACME Statistics 1987.

Subject Choice

There are still different patterns of enrolment by subject for male and female secondary school students, which affect subsequent training and career choice. Clear differences are apparent from fifth form level. For instance, School Certificate Examination Statistics for 1987 show that while there have been increases in the proportion of students taking mathematics and science, female students were more likely than male students to not sit mathematics and science subjects for School Certificate. Males students are more likely to take technical subjects and technical drawing while female students are likely to take arts subjects and typing. Similarly, while Maori first year form 5 candidates increased their participation in mathematics and science, the percentages were less than the percentage increase for candidates overall (see Annex 1).

THE POLYTECHNIC SYSTEM

Background

There are 22 polytechnics in New Zealand, including the Technical Correspondence Institute (TCI), the Central Institute of Technology (CIT) and community colleges. They play a major role in imparting skills to the workforce.

The polytechnic system had its origins in the secondary school system when secondary schools designated as technical colleges provided day and evening classes for apprentices. With the strong demand for technical education, technical colleges were transformed into technical institutes, and subsequently into polytechnics. Initially the main focus of activity was trade, technical, secretarial and business training. Gradually,

however, the range of subjects grew and polytechnics began to offer a variety of courses for service-sector occupations.

Institutions were also set up specialising in national courses. For example, the CIT was established to provide technician and technologist courses and other national courses at sub-professional level. Similarly, national courses were offered by correspondence through the TCI.

Community colleges were established in the mid 1970s, with a stronger regional focus and a broader role in providing continuing education. Over time the distinctions between technical institutes and community colleges have tended to become blurred. Both may perform the dual function of vocational preparation and community education, hence the gradual adoption of the title "polytechnic" for both types of institution.

Types of Courses Offered

The population served by the polytechnic system has broadened to include: school-to-work transition courses for school leavers; pre-apprenticeship training to assist Maori people to gain apprenticeships; labour market programmes for the unemployed; refresher and bridging courses for people seeking to enter or re-enter the paid workforce; "second chance" education courses for adults; and English language instruction for recent immigrants.

There is considerable diversity in the type, level and number of courses and in the mix of courses between institutions. In general, full-year full-time courses, part-time and block courses tend to have a stronger vocational emphasis. The latter are usually undertaken by those in employment and are primarily technician and trade training courses. Short courses seminars are also available, which may be vocational or recreational.

Entry Criteria

In principle, there is open entry to polytechnic courses but selective admission operates for some full-time courses (including TCI and community colleges). For trade courses, first priority is given to apprentices, with non-apprentices filling any remaining vacancies. In practice, this 'filling in' tends to occur in first year courses rather than in more advanced-level courses. Under a number of pilot schemes, students may also gain entry to alternative two year full-time trade training courses without obtaining an apprenticeship. Restrictions which required students to be in concurrent employment before enrolling for technician courses have been removed.

For courses leading to a recognised national qualification, entry criteria are based partly on passes in school examinations to determine the applicant's

likely success in the course. Relevant work and life experience is also taken into account, particularly for mature students. Entry to courses such as Foundation, Access and Bridging courses is usually less stringent than for general vocational training courses because such courses often serve as a stepping stone to higher-level vocational courses. There are usually no well-defined educational pre-requisites for general community and hobby courses.

Enrolment Patterns

At 1 July 1987 the polytechnic system catered for 78,837 students enrolled in full year courses. Of these, 11,153 were in full-time courses and 67,684 were in part-time courses. Over half of the full-year part-time students were enrolled with the TCI.

In addition, polytechnic course enrolment figures for 1987 show 42,692 enrolments in block courses, 81,918 in short courses (part-time attendance for less than 26 weeks in a year), and 29,965 enrolments in seminars (full-time attendance for less than 1 week).

Enrolments in recognised (or formal) vocational courses by level are given in Annex 1.

a) **Gender**

There are marked differences between males and females in enrolments by course type (full-time, part-time, block course and short course), as well as differences in terms of subject choice. The main points of interest are:

- Around 70 percent of users of full-time courses are female.
- The majority of women are taking courses in traditional areas of employment for women such as clothing and textiles, service trades, nursing and secretarial studies.
- Male student account for 68 percent of all students in part-time full-year courses at polytechnics and the Technical Correspondence Institute.
- Male students tend to be concentrated in trade and technical courses, which are delivered primarily through part-time or block courses. Males account for 78 percent of all block course enrolments.
- Females account for 61.6 percent of all enrolments for short courses.

b) **Age**

The majority of polytechnic students (62 percent) are in the 16-24 age group.

COLLEGES OF EDUCATION

There are six colleges of education in New Zealand.

Formerly colleges of education were known as teachers colleges which reflected their single focus - providing vocational education and training for the teaching profession. More recently, colleges of education have expanded their activities. They now offer a greater range of courses including "refresher" training for in-service teachers, post-service training leading to advanced teaching qualifications, and specialist courses in areas such as early childhood training, speech language therapy, "special needs" education, bi-lingual teaching and teacher librarianship.

Some teacher updating courses are also offered by correspondence through Massey University to assist in-service teachers to upgrade their skills and qualifications.

Entry Criteria

Entry to Colleges of Education is restricted because places are set based on projections of the future demand for teachers.

Admission to the Colleges is dependent on having satisfactory passes at secondary school although these requirements may be waived for adult students. New selection procedures were introduced in 1986 for applicants with knowledge, understanding and skills in Maori language and culture.

Enrolment Patterns

Most enrolments are for full-year courses for initial teacher training. Short or block courses usually provide in-service training, and kindergarten teachers usually study part-time.

As at 1 July 1987 there were 2966 primary teacher trainees, 1166 secondary trainees and 324 kindergarten trainees. Of these, 455 trainees were attending polytechnic or university courses full-time. Colleges of education also catered for 170 students in full-time full-year continuing education courses.

In comparison with polytechnic students, students at colleges of Education are more likely to be from older

age groups and the majority are female. The proportion of students from different ethnic backgrounds is also increasing as a result of changes in the selection criteria. While there are difficulties in measuring the socio-economic status of students, survey data suggests that teacher trainees are drawn from higher socio-economic groups than polytechnic students. In comparison with university students, however, teacher trainees are more representative of the general population in terms of socio-economic background (see Annex 1).

UNIVERSITIES

New Zealand has six universities and one agricultural college.

As higher educational institutions, universities provide advanced training for many professional and technical occupations, as well as undertaking research and promoting scholarship. Universities offer a mix of under-graduate, post-graduate, professional and graduate programmes, as well as some adult continuing education programmes. The vocational emphasis is particularly evident in faculties such as science, engineering, agriculture science, law and commerce where the university is essentially a training ground. Universities also equip people with generalist skills which may not be immediately applicable to employment.

There is considerable diversity in the range of courses offered. Some universities specialise in particular types of courses. Specialist schools are associated with some universities, for example, medicine and dentistry at Otago and engineering in Auckland. Massey and Lincoln College have tended to specialise in agricultural sciences. Massey also has an emphasis on applied studies, and extra-mural study in areas such as education and business studies.

Entrance Criteria

In principle a university education is open to everyone holding an educational qualification approved by the University Entrance Board. Students over the age of 21 years who do not have the required entrance qualifications may be granted provisional admission by the university, depending on the availability of places and the suitability of the applicant.

In 1987, 16 percent of first year university students had no recognised secondary school qualifications, but nearly half of all first year students had Higher School Certificate qualifications or better.

Enrolment Patterns

The university system catered for 37,074 full-time students, 14,965 part-time students and 14,396 extra-mural students in 1988 (excluding overseas students). In addition, there were 745 internal students taking short courses of four weeks or longer but for less than an academic year.

Of all university students, 56,712 were undertaking undergraduate degrees, diplomas, certificates and other courses. A further 7,643 students were enrolled in post-graduate degrees, diplomas, certificates and other courses. As well, 5,095 students were taking subjects towards a certificate of proficiency or for personal interest (see Annex 1).

At post-graduate level, the majority of students were enrolled in post-graduate diploma, masters or bachelor (honours) degree courses. Only 15.3 percent were enrolled in PHD studies. Over half of the PHD students were enrolled either in the science or engineering faculties.

There have been marked changes in course enrolments for first year students. In particular, there have been significant increases in the proportion of students enrolled in commerce and computer science subjects (see Annex 1).

a) Gender

In terms of total enrolments at the under-graduate level, there is now virtually equal representation of male and female students. Males account for 55 percent of students in post-graduate courses. At doctorate level the differences are more marked. Seventy-two percent of PHD students are male.

Females are concentrated in arts subjects and education while males still predominate in science and engineering. There has been an increase in the number of women graduating with qualifications other than Bachelor of Arts, but the gains have been smallest in science and engineering degrees. (see Annex 1).

b) Age

The majority of university students were in the core 18-24 years age group, but a greater proportion of external and part-time students are in the older age groups. In 1987, about 60 percent of extramural students and 43 percent of part-time students were aged 30 years and over, whereas only 6 percent of full-time internal students were 30 years and over.

c) **Ethnicity**

Maori and Pacific Island people were under-represented at New Zealand Universities relative to the ethnic composition of the population (See Annex 1).

d) **Socio-economic status**

As noted earlier, analysis of the socio-economic status of university students suggests that students from families of high socio-economic status are over-represented. For example, approximately 50% of the fathers of university students had professional, business or managerial occupations as against 14 percent of the population on a whole.

Participation in the Post Compulsory Education and Training Sector

While enrolment data is useful in examining the nature and scale of activities within educational institutions, age-specific participation rates provide a fuller picture of the proportion of the population participating in PCET at different ages.

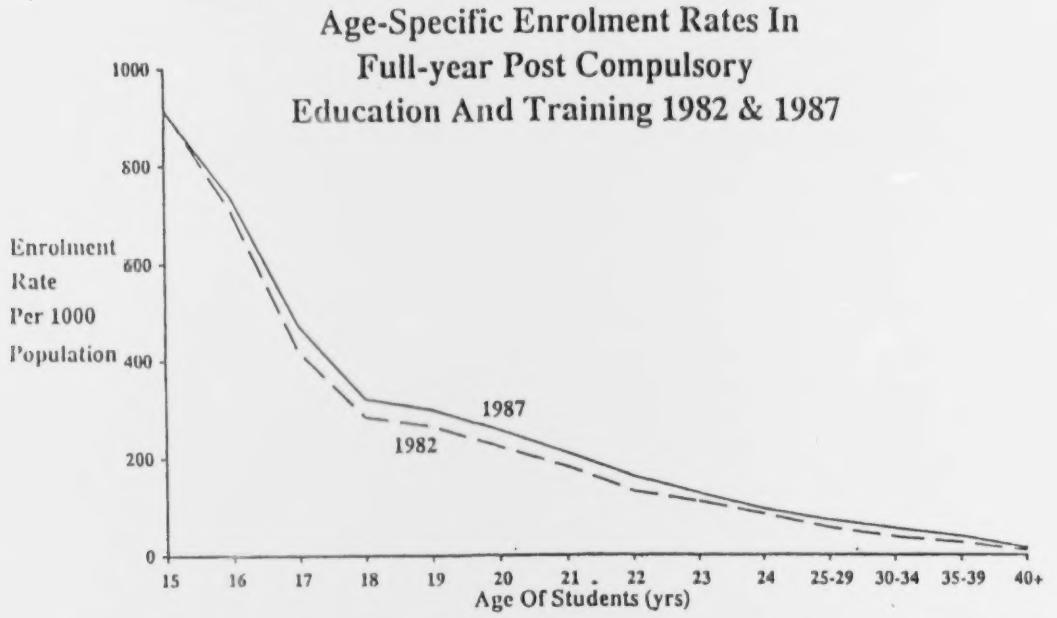
Figures 1 and 2 illustrates the changes in rates of age-participation of students in publicly funded post-compulsory education and training institutions from 1982 to 1987. Rates of participation fall steeply after the age of 16 so that by the age of 18 only about one third of a cohort are participating in full-time or part-time courses. By the age of 24 fewer than 10 percent of an age cohort are participating in PCET.

As Figure 1 shows, there have been only small increases in rates of participation at different ages. Research undertaken by the Department of Education's Research and Statistics Division has shown that most of the increase in participation for the 18 to 24 age group can be attributed to the increasing proportion of this age group attending university (Pole, 1988). Over the same period, participation in part-time polytechnic courses declined for the 18-24 age group. Economic factors which have adversely affected apprenticeships in trades and technician occupations are the major reason for this result. As noted earlier, the majority of polytechnic enrolments are part-time.

Funding Arrangements

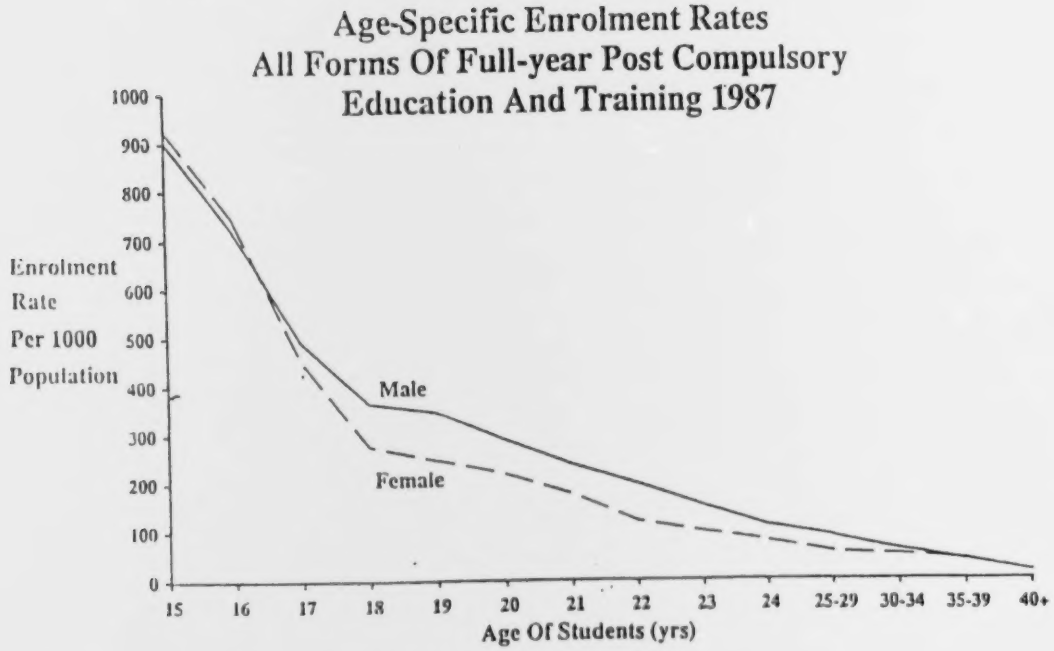
The post compulsory education sector comprising upper secondary school, polytechnics, colleges of education and universities is funded through Vote: Education.

FIGURE 1



Note : Includes students enrolled in full-year full-time and full-year part-time courses at secondary schools, polytechnics, teachers colleges and universities. Excludes students enrolled in full-year part-time night courses at secondary schools.

FIGURE 2



Source: N. Pole, "Participation and Retention in Post Compulsory Education and Training", Unpublished paper, 1988.

Prior to the October 1989 reforms, polytechnics and colleges of education received annual allocations of funding directly from the Department of Education. The degree of control exercised over the funding within these institutions was partly a reflection of historical factors since technical schools were originally part of the secondary school system. By contrast, universities have always enjoyed more autonomy from the Department of Education than polytechnics. University funding was distributed by a statutory body, the University Grants Committee.

Government Expenditure on Education and Training

Between 1986-87 and 1987-88 expenditure on education through Vote: Education grew from $2,595.2 million (12.4 percent nett government expenditure) to $3,118.2 million, representing 13.5 percent of nett government expenditure. (see Annex 1,). The area of government expenditure experiencing the largest increase over this period was community and polytechnic education which recorded an increase of 42%. Additional tutors for Link, Access, Employment Rich, Foundation and trade traineeship courses were the main reason for the increase in expenditure. The additional students in these courses also increased the amount of money that went in Tertiary Assistance Grants to polytechnic students and the large increase in capital works expenditure. [1]

A breakdown of government spending on education, and spending on post-school education by sector is given in Annex 1.

LABOUR MARKET PROGRAMMES

The common longer-term objective of different employment and training measures is to assist the unemployed to re-gain employment. As unemployed individuals face a range of barriers to employment, it is appropriate to have a range of measures to address them. These barriers include lack of information about job availability, a variety of skill deficiencies and various other forms of labour market disadvantage. Figure 3 illustrates the roles and relationships between the main programmes for employment and training.

Labour market training programmes for the unemployed have become more common, particularly since the late 1970s, but it was not until 1987, when the Access training programme was established, that labour market training programmes began operating on a large-scale. A summary of the objectives of the current training programmes is

1 Department of Education, "Commentary" in Educational Statistics of New Zealand 1988, p.13

FIGURE 1 : Diagram of Roles and Relationships between Programmes for Employment and Training

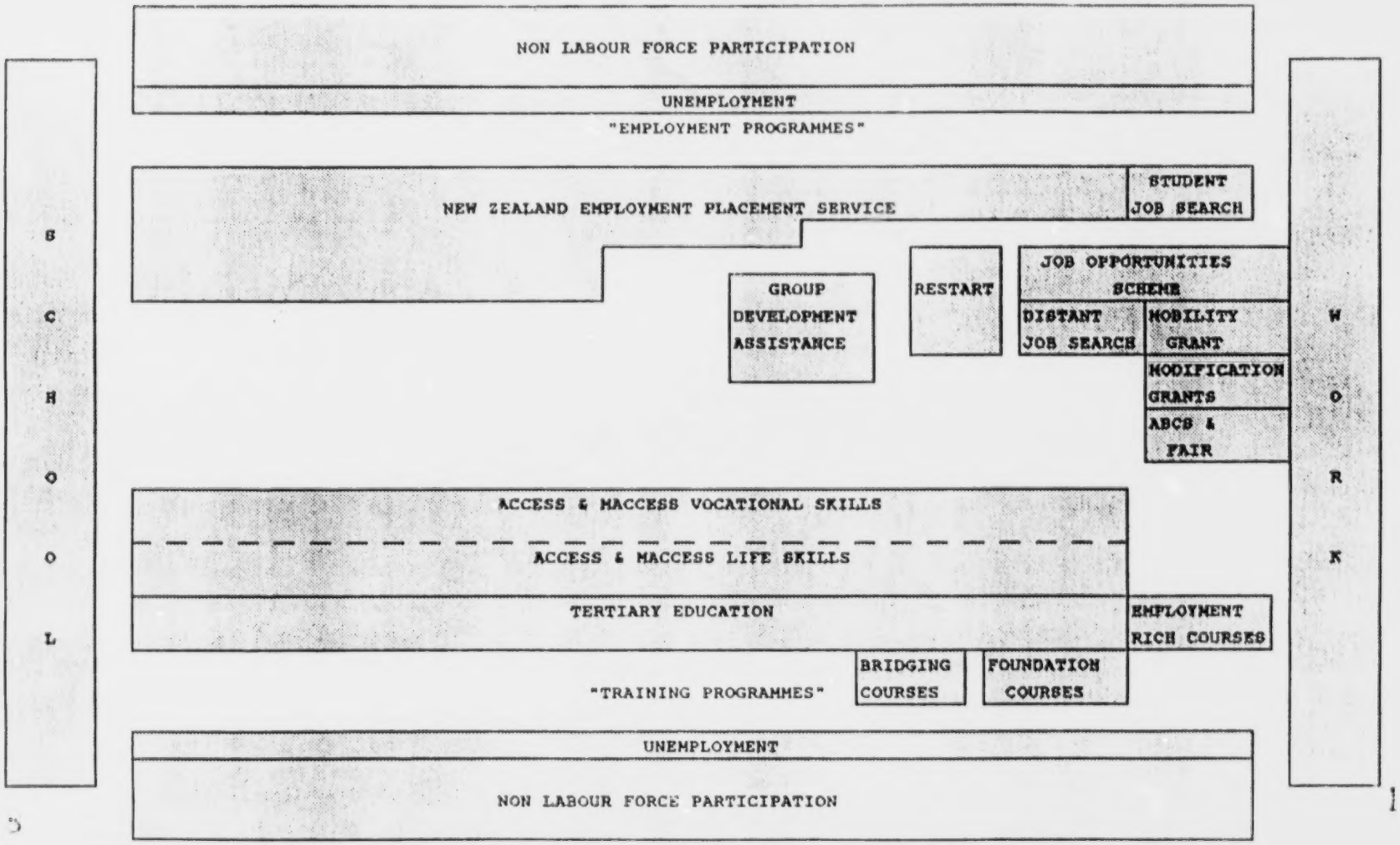


TABLE 2

NUMBERS ON lABOUR MARKET TRAINING PROGRAMMES AND COSTS FOR THE 1988/89 FINANCIAL YEAR

Programme	Total Numbers of Trainees	Costs $000's
Department of Labour		
Access	61,567	239 011
Limited Service Volunteer Scheme	262	1004
Female Apprentice Incentive for Recruitment (FAIR)	289	265
Apprentice Block Course Subsidy (ABCS)	8,447*	4091
Department of Education		
Foundation Courses	1,246	10 540
Employment-Rich Courses	2,784	30 520
Bridging Courses	236	800
Department of Maori Affairs		
Maori Access	10,540	62 043
Vocational Training Schemes	990	n/a

Source: CEDEC Evaluation of Employment and Training Programmes, and supplementary information provided by the Department of Education.

Notes:

1. All figures are inclusive of GST.
2. Programme costs exclude internal administrative costs within Departments, but include training allowances paid to trainees.
3. Department of Education figures are estimates based on conversion of academic year figures to financial year.
4. All trainee figures include early terminations.

* Numbers of ABCS subsidies paid to employers.

presented in Annex 2, together with a description of the targeting, delivery, and funding mechanisms. An estimate of the numbers in each programme assisted over the 1988/89 year and the estimated costs of each service or programme is set out in Table 2.

Table 3 summarises the immediate post-programme destination of trainees in 1987/88 and 1988/89 for the programmes for which such data was available. It should be remembered that these figures are averages for all courses run within a particular programme. The range within any given programme can be very wide (e.g. for ACCESS in 1988/89, the range of employment outcomes at the end of the course ranged from 0% to 100%). Because programmes size varies considerably (as shown in Annex 2), percentage outcome results for the smaller programme also need to be interpreted with some caution.

TABLE 3

Throughput destinations 1987/88 financial year

PROGRAMMES	Entering Unsub emp	Entering Subs emp	Further Ed & Tr	Unemployed	out of Lab force	Other	Total
ACCESS	18.3%	1.1%	30.6%	33.5%	5.8%	10.8%	100.0%
Ltd Serv Vol Sch	12.7%	8.1%	9.9%	55.7%	0.0%	13.6%	100.0%
Foundation	43.0%	0.0%	35.0%	9.0%	0.0%	13.0%	100.0%
Employment Rich	69.0%	0.0%	20.0%	5.0%	0.0%	6.0%	100.0%
Bridging Courses	not yet underway						
Maori Access	29.1%	0.0%	30.2%	12.7%	6.0%	19.6%	97.6%

Throughput destinations 1988/89 financial year

PROGRAMMES	Entering Unsub emp	Entering Subs emp	Further Ed & Tr	Unemployed	out of Lab force	Other	Total
ACCESS	22.8%	1.6%	28.5%	32.0%	5.9%	9.1%	100.0%
Ltd Serv Vol Sch	19.2%	0.0%	7.5%	56.2%	2.7%	12.3%	97.9%
Foundation	44.9%	0.0%	37.9%	0.0%	11.0%	6.2%	100.0%
Employment Rich	52.6%	0.0%	34.7%	0.0%	6.4%	5.7%	99.3%
Bridging Courses	52.9%	0.0%	44.8%	0.0%	2.2%	0.0%	100.0%
Maori Access	25.4%	2.5%	33.3%	13.9%	8.0%	16.9%	100.0%

may not add to 100% due to rounding

The different mix of outcomes for different programmes shown by Table 3 is not surprising. Some programmes are more oriented to enabling participants to proceed to further education and training than others. The probability of positive outcomes for trainees also varies

with their level of ability and skills. For example, as those taking ACCESS courses tend to be more disadvantaged in the labour market than those taking Employment Rich courses, they are correspondingly less likely to obtain employment or move on to further education and training on completion of their ACCESS course.

In addition to specific training programmes, the Department of Labour administers some employment programmes which provide opportunities to acquire new skills. For instance, within the Job Opportunities Scheme (JOS) there is a Training in Employment option, which provides an initial training subsidy to employers who employ more disadvantaged jobseekers.

The Department of Labour also administers Conservation Corps, a relatively new programme, which aims to provide young people with opportunities for personal development and skill acquisition through undertaking conservation projects of lasting benefit to the community. The scheme subsidises some project costs and the costs of providing members with training allowances.

Participants in Labour Market Training Programmes

Participation is largely determined by the targeting criteria which focuses on those who are disadvantaged in the labour market. Currently, most training schemes cater predominantly for young unemployed. Access and MAccess have a high take up rate by Maori and Pacific Island people due to the targeting of the schemes. Women are also well-represented in Access since the scheme caters for registered unemployed, as well as those who are not registered as unemployed and may be outside the current workforce.

Funding Arrangements

The majority of labour market training programmes are administered by the Department of Labour although funds are also paid directly to polytechnics from the Department of Education for Employment Rich, Bridging and Foundation courses. Under the Access programme, there is competitive tendering by state, community and private providers for Access funds. Local Regional Employment and Access Councils allocate funding from a fixed regional budget to providers. The funding formula also provides incentives to target training to those at the most disadvantage in the labour market.

APPRENTICESHIPS

Background

The apprenticeship system has been a traditional route through which young people can acquire trades skills and a recognised, portable qualification. Formal apprenticeships are predominantly a form of on-job

training although in some industries there is an increasingly large off-job component. Formal training occurs through block courses conducted at Polytechnics. Apprentices sit a final examination administered by the Trades Certificate Board (TCB). However many apprentices can practice their trade without acquiring a recognised Trade Certificate.

Apprenticeship Contracts

During the year to 31 March 1989, there were 5,611 new apprenticeship contracts, and as at 31 March 1989, 26,256 contracts were still in force (Table 4).

Table 5 illustrates the sharp decline in new apprenticeship contracts, with an overall decline of over 25 percent over the last five years.

Participants in Apprenticeship Training

Very little statistical information is collected on participants in apprenticeships, except by gender. Of all new apprentice contracts for the year to March 1989, only 17.3% were taken up by women. Moreover, 77% of these contracts were in ladies' hairdressing. Therefore not only do women have fewer opportunities to pursue structured training within employment and obtain recognised, portable qualifications, but they tend to undertake apprenticeship training within a narrow occupational range (Table 6).

Apprenticeship statistics are not collected by age or ethnicity. However, a small-scale survey of apprenticeship carried out in 1987 by the Department of Labour suggests that the typical apprentice is likely to be a young pakeha male who has recently left school. Other findings of interest were that the majority of apprentices (62%) in the sample had some formal school qualifications. This is not surprising since nearly all trades have a formal minimum entry qualification of at least 2 years' secondary education. In terms of socio-economic status, as measured by the Elley-Irving scale, the results did out bear out the traditional view that apprentices follow their fathers into trades and generally come from the lower socio-economic groups.

TRAINING WITHIN ENTERPRISES

Training within enterprises includes on-job and off-job training, as well as employer-sponsored training at state or private institutions. Industry training boards, employer organisations and professional bodies are involved in promoting and, in some cases, delivering training at industry level.

Little systematic information has been collected on the amount of training which occurs within enterprises

TABLE 4

ANNUAL RETURN OF APPRENTICES
FOR YEAR ENDED 31 Mar 89

TRADE	TOTAL APPRENTICES EMPLOYED AT BEGINNING OF THE YEAR	NEW CONTRACTS DURING THE YEAR	CONTRACTS LAPSED OR CANCELLED DURING THE YEAR	CONTRACTS COMPLETED DURING THE YEAR	TOTAL APPRENTICES EMPLOYED AT END OF THE YEAR
Aircraft	154	63	7	8	202
Baking	402	113	33	90	390
Boilermaking	138	11	16	34	99
Bricklaying	138	39	9	40	128
Carpentry	4138	739	236	1142	3489
Clothing	48	8	2	17	37
Coachbuilding	1851	361	185	398	1626
Cookery	187	239	46	67	309
Electrical	2525	492	111	616	2287
Engineering	2812	291	127	845	2165
Glazing	262	45	17	69	257
Footwear Manuf & Repair	81	6	14	27	46
Furniture	970	209	82	261	794
Hairdressing, Ladies	2238	822	326	561	2171
Hairdressing, Mens	24	5	2	2	25
Heating and Ventilating	81	26	7	17	83
Horticulture & Turf Mgmt	499	136	34	134	467
Industrial Instrumentatio	71	15	2	20	64
Jewellery	118	26	10	24	110
Masonry	18	8	2	5	19
Motor	3669	713	221	1080	3117
Moulding	18	6	2	5	17
Painting	769	182	89	198	670
Piano Repair & Tuning	4	1	0	2	3
Plastering	132	21	16	31	106
Photo-engraving	211	44	12	53	190
Plumbing and Gas-fitting	1049	193	64	255	924
Printing	888	145	48	275	709
Radio	302	73	26	106	243
Refrigeration Engineering	198	48	13	50	183
Retail Meat	956	275	75	282	874
Saddlery	99	15	11	18	85
Sheetmetal	414	98	32	78	398
Shipbuilding	316	41	33	40	285
Signwriting	197	44	13	37	191
Timber Industry	117	32	11	48	89
Woollen Industry	6	1	1	1	5
Miscellaneous Trades	156	25	12	23	69
TOTALS	26256	5611	1947	6959	22926

NOTE: The figures in this table are affected by a small number of transfers between districts not completed by 31 March

Source: Department of Labour, Annual Return of Apprentices for the year ended 31 March 1989.

TABLE 5

NEW APPRENTICESHIP CONTRACTS BY TRADE

TRADE	YEAR ENDED 31 Mar 89	FIVE YEAR CHANGE No.	%	ANNUAL CHANGE No.	%
Aircraft	63	58	1160.0	30	90.9
Baking	113	5	4.6	-26	-18.7
Boilermaking	11	-33	-75.0	-29	-72.5
Bricklaying	39	-1	-2.5	7	21.9
Carpentry	739	-151	-17.0	-363	-32.9
Clothing	8	-21	-72.4	-5	-38.5
Coachbuilding	361	-88	-19.6	-157	-30.3
Cookery	239	239		45	23.2
Electrical	492	-56	-10.2	-247	-33.4
Engineering	291	-489	-62.7	-303	-51.0
Flat Glass	45	-1	-2.2	-32	-41.6
Footwear Manuf/Repair	6	-63	-91.3	-16	-72.7
Furniture	209	-25	-10.7	-65	-23.7
Hairdressing, Ladies	822	113	15.9	-6	-0.7
Hairdressing, Mens	5	-4	-44.4	-6	-54.5
Heating and Ventilation	26	10	62.5	8	44.4
Horticulture/Turf Mgmt	136	5	3.8	-17	-11.1
Industrial Instrumentatio	15	-16	-51.6	-2	-11.8
Jewellery	26	-5	-16.1	-18	-40.9
Masonry	8	-1	-11.1	1	14.3
Motor	713	-276	-27.9	-209	-22.7
Moulding	6	-3	-33.3	2	50.0
Painting	182	-67	-26.9	-44	-19.5
Piano Repair & Tuning	1	0	0.0	-1	-50.0
Plastering	21	-12	-36.4	-18	-46.2
Photo-engraving	44	9	25.7	-24	-35.3
Plumbing and Gas-fitting	193	-86	-30.8	-124	-39.1
Printing	145	-59	-28.9	-109	-42.9
Radio	73	-15	-17.0	-2	-2.7
Refrigeration Engineering	48	9	23.1	-9	-15.8
Retail Meat	275	-30	-9.8	-36	-11.6
Saddlery	15	-8	-34.8	-13	-46.4
Sheetmetal	98	12	14.0	-29	-22.8
Shipbuilding	41	4	10.8	-74	-64.3
Signwriting	44	-3	-6.4	-9	-17.0
Timber Industry	32	-6	-15.8	0	0.0
Woollen Industry	1	-3	-75.0	-1	-50.0
Miscellaneous Trades	25	-26	-51.0	-34	-57.6
TOTALS	5611	-1084	-16.2	-1935	-25.6

Source: Department of Labour, Annual Return of Apprentices for the year ended 31 March 1989.

TABLE 6

NEW APPRENTICESHIP CONTRACTS BY TRADE
(FEMALE ONLY)

TRADE	YEAR ENDED 31 Mar 89	FIVE YEAR CHANGE No.	%	ANNUAL CHANGE No.	%
Aircraft	8	0		-1	
Baking	9	2		-5	
Boilermaking	0	0		0	
Bricklaying	0	0		0	
Carpentry	8	7		2	
Clothing	6	-3		0	
Coachbuilding	8	1		3	
Cookery	68	68		8	
Electrical	3	-11		-13	
Engineering	6	4		0	
Flat Glass	4	0		-6	
Footwear Man & Repair	1	1		1	
Furniture	1	-23		-1	
Golf Course Greenkeeping	0	0		0	
Hairdressing, Ladies	746	37		9	
Hairdressing, Mens	1	-2		-4	
Heating and Ventilating	0	0		0	
Horticulture & Turf Mgmt	24	-1		-10	
Industrial Instrumentatio	1	-3		-2	
Jewellery	6	1		-5	
Masonry	0	0		0	
Motor	9	-1		-2	
Moulding	0	0		0	
Painting	12	0		2	
Piano Repair & Tuning	1	1		0	
Plastering	0	0		0	
Photo-engraving	18	6		-11	
Plumbing and Gas-fitting	1	0		0	
Printing	21	-15		-12	
Radio	7	4		5	
Refrigeration Engineering	0	0		-1	
Retail Meat	3	0		-5	
Saddlery	1	0		-3	
Sheetmetal	0	-1		0	
Shipbuilding	0	0		0	
Signwriting	5	-3		-7	
Timber Industry	0	-1		-1	
Woollen Industry	0	0		0	
Miscellaneous Trades	2	-1		0	
TOTALS	972	67	7.4	-59	-5.7

NOTE: Percentage changes have not been calculated for individual trades due to the small number of apprenticeships in most cases.

Source: Department of Labour, Annual Return of Apprentices for the year ended 31 March 1989.

although some groups such as the Employers Federation have conducted training surveys of their members. To remedy this problem, a question on training expenditure has been included in the next Annual Enterprise Survey which covers 25,000 enterprises. Unfortunately, the information will not be available in time for inclusion in this report.

Government support for training within firms or enterprises has generally been limited to some administrative support for apprenticeship training, as well as specific subsidies (see Table 2). Until recently Government support was also available for the Vocational Training Council (VTC), a tripartite advisory council and a network of industry training boards. On the 31st March 1989 the Vocational Training Council was dis-established. Assistance to industry training boards was also withdrawn from June 1989, although transitional funding is available to Boards until October 1989.

TRADE UNIONS

Some training is also conducted by individual trade unions, usually for trade union delegates. The Trade Union Education Authority ran 362 programmes for the year ended 16 May 1989. 4650 people attended these programmes.

PRIVATE TERTIARY INSTITUTIONS

Many private institutions offer correspondence courses, certified vocational training courses, 'customised' training for companies and training consultancy services. It is difficult to quantify the amount of training which occurs within these institutions because statistics are not collected on a national basis.

NON-FORMAL TRAINING ORGANISATIONS

A plethora of community organisations, churches, special interest groups, adult learning groups and voluntary tutors offer non-formal education. The groups control their own learning, independently of imposed curicula and of outside professionals and institutions. Many of the courses are primarily for hobby or recreational purposes. Nevertheless, such courses may have possible 'spin offs' in terms of employment or self-employment, and may generally enhance self confidence and self esteem which are important attributes for jobseekers.

CERTIFICATION AUTHORITIES

A range of bodies are currently involved in organising vocational training and issuing qualifications for various occupations. These include:

- the Authority for Advanced Vocational Awards (AAVA) and the Trades Certification Board (TCB);
- 35 national apprenticeship committees and around 350 local apprenticeship committee; and
- over 80 other organisations/registration bodies which assist in the development and certification of training, in conjunction with polytechnic providers.

CONCLUSION

New Zealand's arrangements for further education and training have undergone considerable change in recent years. Gradually the two major strands - trades and technical education and general academic studies at university - have been supplemented by a range of transition education and labour market training programmes. The latter were grafted on to the traditional set of arrangements for further education and training. A more varied pattern of provision has therefore evolved over time with separate arrangements for funding and certification, and different accountability structures for training providers across the PCET sector.

Another significant change has been the shift towards training a greater proportion of young people within educational institutions, which is associated with the sharp decline in traditional work-based forms of training such as apprenticeship, and the rise of larger-scale labour market training schemes. Within schemes, the majority of the training is community-based or takes place within the polytechnic system.

New patterns of participation are also emerging with changes in rates of retention at secondary school and some improvement in rates of participation in the post-compulsory sector across all age groups. This suggests that the pattern of leaving school at fifteen with few or no qualifications and acquiring skills informally on the job is becoming less prevalent, although for young Maori this practice is still common. There is also considerable variation in participation in terms of the age, gender, socio-economic status and ethnic origin of participants.

The following section examines the pressures for change and adaptation and the issues which have created the major impetus for reform.

SECTION 3:

THE CLIMATE FOR CHANGE IN EDUCATION AND TRAINING

Introduction

The pressures for the reform of New Zealand's system for post-compulsory education and training system need to be understood within the context of the rapid, unprecedented economic and social changes which New Zealand has experienced in recent years.

Economic and Structural Changes

Following the international oil crisis and the entry of the United Kingdom into the European Economic Community in the early 1970s, New Zealand has faced increased competitiveness in world markets, and greater pressures for change. In order to become more competitive with its trading partners and boost export revenue, New Zealand has sought new markets and widened its export base from raw materials to "value added" products and services. In addition, as New Zealand has a relatively small domestic market, many New Zealand enterprises are now producing for the Australian market, taking advantage of opportunities offered under the Closer Economic Relations pact with Australia (CER).

From a reliance on protectionism and a controlled exchange rate, New Zealand has also moved towards a more open economy. Import controls and tariffs have gradually been removed, government subsidies to ailing industries have been withrawn, and the emergence of a more de-regulated business environment has provided greater scope for initiative and entrepreneurship with fewer central controls. These regulatory changes coupled with a more competitive economic climate, have had a strong impact on primary producers and manufacturers.

Research by the New Zealand Planning Council (Haines, 1989) suggests that New Zealand has experienced significant changes in employment growth and decline within different sectors of the economy. These changes are a continuation of trends which began earlier this century. For instance, in 1901 the primary sector provided almost 40% of all employment, and secondary industries within this sector employed around one third of all workers. By contrast, service industries employed less than one third of all workers. By 1986 the service sector employed two thirds of all workers, and the primary sector provided around 12% of employment. Manufacturing has also declined in importance over the period, but to a lesser extent.

Forecasts by the National Sectoral Working Group, Prospects : Economic and Sectoral Trends to 1997, indicate that there is likely to be a continued concentration of employment in the service sector in the long term, although in the period 1984-1992 the primary sector is expected to have the highest percentage growth rate.

There has been a marked decline in the number of unskilled and semi-skilled occupations, particularly in the manufacturing sector. The proportion of people employed in production and related trades occupations has dropped from 37 percent in 1971 to 28 percent in 1988, while occupations for administrative, professional and technical workers, sales, and personal services have absorbed a growing share of employment.

In a pattern familiar to other OECD countries, New Zealand has experienced a growth in small businesses and self-employment, and an increase in part-time, casual and contract employment. These trends in working patterns are also expected to continue.

Technological Changes

Like other developed economies, New Zealand has experienced rapid technological change. Many routine process jobs have been automated in manual and low grade clerical occupations. In other clerical, technical and professional occupations, the job content has changed substantially. In many occupations such trends have led to demands for new skills and for a higher level of skills rather than to "deskilling". Technological advances, especially in information technology, have led to a strong growth in computing and other knowledge-based industries and services.

Changes in the Workforce

The size and composition of the labour force has undergone significant changes. Over the past twenty years there has been a growth in the total size of the labour force. Most of this increase can be attributed to the effect of the relatively high birth rates during the 1950s and 1960s, as well as the steady increase in female labour force participation rates. The latter trend is apparent in other OECD countries and is associated with a number of factors including different fertility and childrearing practices, changes in social attitudes regarding the role of women in paid employment and the greater availability of part-time work.

There have also been changes in the age and ethnic composition of the workforce, with Maori, Pacific Island polynesians and other ethnic groups making up a higher proportion of the workforce. Greater numbers of immigrants of non-English background are also settling in

New Zealand as a result of changes in immigration policy, particularly since 1986.

Since the early 1980s there has also been a large concentration of young people aged 18-24 years, which has increased demand for employment and training. The pressures have been particularly severe for young Maori as there are large numbers in 18-24 years age group. The latter trend is a mostly a result of the later decline in Maori rates of fertility.

In the longer term, however, New Zealand faces the prospect of a shortage of young labour force entrants. In fact, a decline in the number of people in the 18-24 year old age category is already under way and will accelerate in the 1990s. The reduction in the number of labour force entrants has major implications for the PCET sector and for employment.

Moreover, while New Zealand currently has a relatively youthful population by OECD standards, the overall trend will be towards an ageing population and an increasing proportion of the workforce in the older age categories. Women, Maori and people of Pacific Island backgrounds are also likely to make up a higher proportion of those in the labour force than at present.

Unemployment

Unemployment has increased significantly in recent years. For the June Quarter 1986, the unemployment rate was 5%. By June 1989, the rate had climbed to 8.3%, as measured by the Household Labour Force Survey. The proportion of jobseekers who are long-term unemployed has also grown significantly. Certain groups have experienced high rates of unemployment, notably Maori, Pacific Island polynesians and young people aged 15-24 years. Moreover, it is recognised that even with a general improvement in employment prospects, those most disadvantaged in the labour market are likely to remain th most disadvantaged.

Many of the unemployed have low skill levels, few formal qualifications and have had little opportunity to upgrade their skills. As the Government has moved towards a more active labour market policy, greater emphasis has been placed on training measures for the unemployed and other measures which promote labour market adjustment.

The Transition from School to Work

Changing labour market conditions, particularly the disappearance of many jobs formerly undertaken by school-leavers and rising skill requirements by employers have made the transition from school to working life far more complex for young people. Young people are also experiencing greater difficulty getting a foothold into employment through traditional means such as

apprenticeships. Apprenticeships have dwindled due to the economic downturn and longer-term structural changes within employment. Fewer jobs are in the manufacturing and trades areas covered by apprenticeship arrangements. More generally, rising unemployment has resulted in increased competition for entry-level jobs, in both skilled and unskilled occupations.

The high proportion of young people were leaving school without gaining educational qualifications or the basic skills needed for working life is also of concern. A very small proportion were entering further education and training beyond school.

Recent Reviews of Post Compulsory Education and Training

Taken together, the above factors have generated demands for a more skilled and adaptable workforce, and for recurrent training and continuous skill enhancement throughout working life. Education and training arrangements for the labour force therefore need to exhibit flexibility and responsiveness, so that they can respond to rapid shifts in the demands for new skills and knowledge, and for multi-skilling. As well, the education and training system must cater for the diverse needs of people within the labour force and at different stages within their lives.

Many reviews have been undertaken in New Zealand over the past few years to consider the adequacy of various aspects of the education and training system. In 1987 these included: Tertiary Education in New Zealand; The Management, Funding and Organisation of Continuing Education and Training (The Fargher Probine Report); New Zealand Universities :Partners in National Development (The Watts Report); and He Tangata : Report of the Interim Advisory Group on Non-formal Education. (The Shallcrass Report).

In 1988, The Report of the Working Group on Post Compulsory Education and Training (The Hawke Report) brought together the work of previous reviews in the tertiary sector and made a number of important new recommendations for the organisation of PCET. Administering for Excellence: The Report of the Working Party on Educational Administration (The Picot Report) also made equally far reaching recommendations for the secondary school sector. The Government's responses to these two reports: Learning for Life and Tomorrow's Schools were also released in February and August 1989.

In addition, the Royal Commission on Social Policy dealt with a range of education and employment issues in its final report to the Government in April 1988.

FACTORS INFLUENCING PROVISION/PARTICIPATION IN FURTHER EDUCATION AND TRAINING: THE NEED FOR REFORM

Reform of the current system has been advocated on a number of grounds. Broadly speaking these are concerns about the following issues:

- the quantity of training;
- the quality of training supplied by the various institutions and by employers;
- problems of access and equity to educational services for certain groups within society; and
- the administration and funding of further education and training.

Quantity of Further Education and Training

There is fairly widespread agreement that not enough New Zealanders have received further education and training in the past, and that the present volume of training is insufficient to produce a well-trained, flexible work-force.

New Zealand's low rates of participation in further education and training are one indication that not enough people are receiving training. By OECD standards, New Zealand's rates of participation are low, particularly for young people.

Research undertaken by the Department of Education suggests (Pole, 1988) that the small gains in participation of post compulsory level have not been large enough to close the gap between rates of participation in New Zealand and those levels achieved by other countries. Table 7 provides a comparison of age-specific enrolment rates for the 15-24 age group in selected OECD countries. It is noticeable for ages 15 through to 18 years, New Zealand's rates of participation are lower than those recorded for all other countries listed. At the age of 17 a third fewer teenagers are participating in education in New Zealand than the average for all countries listed. At ages 20 to 24, New Zealand's ranking improves slightly although New Zealand still remains 12th out of the 14 countries listed.

There are difficulties in making cross-country comparisons of this nature because of the different types of education and training systems and regulations governing schooling, for example, variation in the official school leaving age and different patterns for training young people, either within educational institutions or largely on the job.

Moreover, while such rates are a useful yardstick for comparing New Zealand's performance with that of overseas

Age-Specific Enrolment Rates for Ages 15-24: Full-time and Part -time
Selected Countries - 1985/86

	Age									
	15	16	17	18	19	20	21	22	23	24
Australia*	95.5	85.8	60.6	46.4	41.3	31.6	25.0	20.1	16.9	15.2
Austria	88.3	85.6	78.1	47.7	23.0	16.2	14.6	13.7	13.2	12.5
Belgium	95.8	92.3	81.9	69.0	55.6	47.6	28.2	21.6	16.9	13.3
Canada	98.5	94.7	77.3	53.1	38.8	34.1	23.8	18.6	13.5	10.0
Denmark	97.4	89.6	74.4	66.6	51.2	36.6	27.3	23.7	20.7	18.9
France	94.9	87.1	77.9	55.6	38.7	25.5	18.5	13.3	9.8	7.4
Germany	100.0	100.0	99.7	83.8	55.9	34.8	25.5	26.9	16.7	16.5
Ireland	94.4	80.3	63.2	39.6	23.6	15.4	9.8	5.5	3.3	2.0
Netherlands	96.3	89.5	75.7	58.8	43.3	31.3	22.7	17.0	13.3	11.2
Norway	100.0	85.1	76.5	62.6	31.9	23.7	24.4	22.6	19.8	16.6
Switzerland	89.4	81.9	81.6	73.2	53.3	29.6	20.6	16.9	15.0	13.9
United States	99.5	94.0	87.9	58.6	44.4	37.1	33.2	22.0	15.1	13.2
New Zealand (1987)#	91.4	73.3	47.6	33.2	31.1	26.5	21.6	16.5	12.9	9.7

Source: OECD(1988) Education in OECD Countries 1985-86, Comparative Statistics, Paris
* Department of Employment Education and Training (1988) Education Participation Rates Australia 1987
# (unpublished) Research and Statistics Division, Department of Education, Wellington.

countries, it is important to bear in mind what participation rates do not measure. Since participation rates measure participation in institution-based, publicly funded institutions, they are a general indicator rather than measuring participation within the PCET sector generally. More importantly, it is not useful to focus on improving participation rates as an end in itself. Substantial increases in skills of the workforce could be achieved by improving on-job training but this result would not be reflected in cross-country comparisons of participation rates.

Statistics on the attainment of formal educational qualifications also suggest that New Zealand has a low level of training and a relatively unskilled workforce if qualifications are used as a proxy for skill levels. According to 1986 Census figures of the population over fifteen years, 48.3 percent had no school qualifications. The proportion of people with post-school qualifications was even greater - 65.8 percent had no formal post secondary qualifications. Attainment of vocational qualifications was also meagre. Only 2.8 percent of the population over fifteen years held a TCB Trades Certificate, and fewer than 1 percent of the population held an AAVA Technicians Certificate in 1986. Only 2.2 percent of the population held an undergraduate degree.

There is little evidence about how much training is occurring within industry, outside of the formal apprenticeship system. It is likely that New Zealand follows overseas trends, particularly the experience of similar countries such as the United Kingdom and Australia. In these countries research indicates that many enterprises tend to train for the short-term, and for the firm rather than the industry as a whole. Overseas research also indicates that in general larger firms tend to provide more formal training for their workforce than smaller firms. In New Zealand a high proportion of business establishments are small firms, although larger firms are more likely to employ labour. Nevertheless, the small business sector still accounts for a significant share of private sector employment.

Overseas data also suggest that the amount of training undertaken by enterprises tends to vary between sectors, with less training occurring in parts of the service sector on the periphery where a high proportion of employees are in part-time, casual, or contract employment. As noted earlier, employment in the service sector and the incidence of part-time, casual and contract employment are both increasing.

Persistant skills shortages, even in periods of high unemployment, may also indicate that New Zealand may not be training enough people but it should be noted that some of the reasons for skills shortages lie outside the training system. High separation rates in some trades and technician occupations, and the recent increase in

the numbers of people emigrating overseas has contributed to skills shortages in some occupations.

Part of the explanation for skill shortages may also be due to lags in the response time to the demand for skills rather than an insufficient quantity of training being supplied. This is a particular problem in skilled occupations which require lengthy periods of training, and in industries where levels of training fluctuate considerably.

Quality of Further Education and Training

In terms of on-job training, one issue which has been highlighted is the need to improve training within enterprises so that it is more systematic and equips people with a range of skills for employment. Section 4 discusses some of the factors which affect the decision by firms to provide firm-specific rather than general training.

Within educational institutions and labour market programmes, the major concern stems from a desire to improve the performance of providers in delivering education and training. One issue which has been examined is attrition in educational programmes within universities. A study in New Zealand of the progression of a 1976 cohort of entrants to 1982 indicated that only 68% of those in full time studies and 57% of those in a combination of full and part time studies had graduated over the period. This is substantially less than in Britain where 90% of full time students graduate. The New Zealand attrition figures are similar to those in Australia and the four year colleges in the United States. However, factors such as admissions policies and the level of financial support to students may also need to be taken into account when considering possible reasons for attrition (Watts, 1988).

Attrition rates for some polytechnic courses are also quite high, particularly for advanced level technician courses. Analysis of drop out rates for the New Zealand Certificate in Engineering (Panckhurst, 1986), identified the following factors as major reasons for drop out: course difficulty, studying by correspondence, study overload while in employment and high examination failure.

Certification

The impetus for reform of the certification system has arisen because of concern about the effectiveness of the present arrangements in meeting the needs of industry and students. One of the shortcomings of the present system is the lack of a comprehensive, coherent framework for recognising skills acquired through post-compulsory education and training. While those who undertake more established forms of training, for instance, through

apprenticeships, or through full-time study at a university or polytechnic are able to acquire recognised, portable qualifications, there are other forms of training where there is no clear or satisfactory system of qualifications.

Many courses in the area of transition education and training and are not linked directly to more formal vocational qualifications. This compounds a problem of equity. Those who are disadvantaged in the labour market are more likely to receive training through a labour market training scheme, and are less likely to receive recognition for the acquisition of those skills. A larger number of secondary school students could also benefit from more flexible certification arrangements as retention rates in the 6th and 7th forms increase. Similarly, many adults and employees engaged in retraining would benefit from a more flexible system which provides a range of entry and exit points, greater opportunities to take modules rather than full-length courses, and clear routes of progression towards further education and training.

New Zealand's current arrangements for recognising different training programmes are highly segmented. There are different certification bodies for different types of occupations and certification may also vary according to where the skill is taught. For example, AAVA is the awarding body for all technician qualifications while TCB is responsible for trades qualifications gained through apprenticeship training. Yet there is considerable blurring and some overlap, especially for advanced trades level qualifications which cover some of the same ground as technician-level qualifications. Similarly, some advanced technician qualifications overlap with professional courses conducted at universities. Weak linkages of this type tend to create difficulties in terms of cross-crediting. Decisions are often made on the basis of the standing of the institution rather than on considerations regarding the student's actual attainment of skills.

The present certification system also tends to contribute to delays in responding to new skill needs within industry because of some of the processes used to develop, update or approve new courses leading to recognised qualifications. At present many of the processes involved in certification are handled centrally which contributes delays within the training system.

Access and Equity

The fourth area driving reform has been concerns about access and equity. Access to further education and training may be constrained by a number of factors. Barriers to training within tertiary institutions may arise because of the location of courses, restrictions on entry to courses (either because of academic restrictions

or resource constraints), timing of courses, difficulties in obtaining educational leave for those in employment, lack of childcare, financial constraints and difficulties in combining paid work and family responsibilities which are often more acute for women. Because of these factors, there are marked differences in participation in PCET for women, Maori, Pacific Island people, those in older age groups, and people from lower socio-economic backgrounds, as noted in Section 1.

The problem of more limited use of higher education is at least partly explained by lower secondary school retention rates for some groups and their poorer level of formal educational attainment. Other factors which help to explain the under-representation of certain groups are attitudinal and arise from the socialisation process. The influence of family and peers is particularly important in helping to form positive beliefs and values regarding further education. There may also be greater barriers for some individuals due to limited access to information. For instance, people from higher socio-economic groups are likely to receive more information from friends and family on education opportunities and the financial rewards associated with further study.

Another group which faces major difficulties in gaining access to further education and training is immigrants of non-English speaking background. Lack of fluency in English has been recognised as an impediment to further training. A related issue is that immigrants are often not able to use the skills they have because their qualifications are not recognised in New Zealand.

Administration and Funding of Further Education and Training

There has been a general perception that New Zealand's investment in post-compulsory education and training needs to be improved. There has, however, been less consensus on how such an increase might be achieved. The debate has been focussed on whether government expenditure on the PCET sector should be increased or, alternatively, whether the funding base should be broadened to increase the level of private contributions to this sector.

At the same time there have been pressures to spend the present government education dollars more efficiently. This has coincided with general reforms in the public sector to increase accountability, devolve functions and contain costs especially administrative costs. Running parallel to this was a concern to improve secondary school retention rates and direct government expenditure more towards active measures such as training rather than unemployment benefit payments.

In terms of the accountability structures, it was generally recognised that some rationalisation of

functions was necessary to enhance the Government's ability to plan and respond to developments in further education and training. As part of this process, there has been some reappraisal of which functions are best dealt with centrally and those which are best devolved to individual institutions. As noted earlier, polytechnics and colleges of education have worked under a more centralised system where the Department of Education has made many operational decisions affecting institutions. This approach has tended to hamper the ability of educational institutions to respond quickly to local conditions and the needs of their clients.

SECTION 4

THE MARKET FOR FURTHER EDUCATION AND TRAINING

This section discusses the concept of a "market" for further education and training by examining the factors which influence the supply and demand for training, and the key factors which are likely to influence the investment decision.

The section first considers the nature of investment in further education and training by individuals and firms, before turning to the role of government. Issues associated with the certification and funding of further education and training, and the New Zealand approach to some of these issues are also discussed.

INDIVIDUALS

The human capital framework suggests that investment in further education or training is not unlike other investment decisions. Investors weigh up the costs and benefits and consider the rate of return from training compared to other investments before making a decision. In addition, the costs of investing now need to be weighed against an increase in life-time earnings, with some adjustment or discounting for the fact that benefits received now have a higher value than those received in the future.

The costs of investment take two forms: direct training costs (fees, living costs, training-related expenses) and indirect or opportunity costs (such as foregone or reduced earnings over the training period). Job satisfaction, status and quality-of-life considerations may also have a bearing on the decision but the approach is primarily concerned with the financial costs and benefits.

Analysing investment decisions by individuals using the concept of "human capital" suggests the following:

First, investment by individuals is likely to decline as the he or she enters the workforce and gains higher earnings.

Second, there are clearly optimal periods for self-investment since it will be less profitable to enter full-time education or training as earnings increase, or later in life because of the shorter earnings period in which to recoup the costs of training. This point has important implications for older workers and for women who are returning to the paid workforce, since it is likely to limit their opportunity to take advantage of training-investment opportunities.

Third, while there is a strong correlation between higher education and higher earnings over a lifetime, age-earning profiles are averages. In practice it is not possible to predict who will do well and who will do poorly because people have differing levels of ability. There is also quite a wide dispersion of wages for people in employment with similar levels of skill and effort because a variety of factors affect subsequent earnings. Consequently the individual has to make decisions based on the expected value of the investment, taking into account likely job openings, wage distribution and the recruitment behaviour of employers. In short, there are difficulties of weighing up the costs and benefits of training because of uncertainty in the labour market.

Fourth, investments in skills differ in important respects from investments in physical capital. Human beings have a finite life span and the investment cannot be secured in the same way as physical capital since skills are inseparable from the person. Also, the characteristics of the individual matter unlike investments in physical capital. Access to finance is therefore likely to be a greater problem for investments in skills than for other investments, even when training offers relatively high rates of return. Unequal access to capital markets by some groups raises further problems, particularly for those who have limited financial means and who are unable to receive assistance from their families.

Fifth, limited information may also mean that the incentives to undertake further education and training are unclear. This problem is exacerbated by the fact that training investment decisions often need to be made at an early stage in life before the person becomes an adult. Each decision on whether to undertake education or training may also affect subsequent decisions which means that early decisions are sometimes difficult to alter. Unequal access to information is likely to result in lower participation by some groups because of different perceptions of the benefits and risks of training investments.

Sixth, different values, expectations and the attitudes of peers and family play an important part in the decision. Household rather than individual circumstances may also be an important factor, particularly when people have dependants. This may result in less investment by some groups. Different attitudes towards long-term investment and repayment of debt may also be relevant.

Conclusion

Individuals have complex motivations for engaging in training and a variety of factors will affect their opportunities to acquire training. Some of the motivations are captured by the human capital approach

which suggests that individuals are likely to invest in further training to maximise their life-time earnings. However, some of the disincentives are likely to be under-estimated by the human capital approach.

While many individuals will "buy" skills to sell in the labour market, there are also barriers to such investment. In particular, uncertainty about the likely returns from training and lack of access to finance or information are likely to reduce the overall level of investment in skills by individuals. Furthermore, despite financial incentives there may be social and attitudinal barriers which limit the acquisition of skills.

FIRMS

Firms provide training to improve the skills of their workforces and raise the overall productivity of the firm. Like other investment decisions, investments in 'human capital' will vary according to the characteristics of the firm and the products or services it produces. A range of factors may have a bearing on the decision including:

- the nature of the product and the production process, and the extent to which skilled labour is required;
- general business expectations and whether the firm's business is expanding or contracting;
- how sensitive the firm is to changes in the business cycle and to exposure to overseas competition;
- the extent to which the organisation is oriented towards profit-making;
- whether the firm is undergoing occupational, technological or structural changes;
- the work practices and organisational culture of the firm, including management attitudes to investments in staff training;
- recruitment and staffing practices, including use of overseas recruitment, development of career structures, general wage and employment conditions, and the use of contract, casual or part-time staff;
- the level of staff turnover, since the firm may lose some or all of its outlay on training; and
- the role of trade unions within the firm or enterprise.

Supply of Training by Firms

The "training" supplied by firms may be oriented to the acquisition of general skills or enterprise specific skills. It is also useful to distinguish between formal and informal training supplied by firms. Formal training (either on-job or off-job) involves a structured, or systematic learning process to expose employees to a variety of skills they will need to perform their jobs effectively. Such training may also attempt to instill work habits, or bring about changes in attitudes and behaviors. By contrast, informal training usually occurs on-job and frequently involves "learning by doing" to improve basic skills through the repetition and practice of work tasks. Some training of the second type is necessary for almost all jobs.

There is likely to be wide variation between firms in terms of the mix of formal and informal training, and in the extent to which firms conduct formal training themselves or use outside training services. Enterprise-specific training tends to be the predominate form of training provided by firms, whereas more general training may be provided within or outside the firm.

A variety of factors influence the decision to provide training or to purchase training. Some firms may have the skills and expertise to undertake the training themselves, and at a lower cost than purchasing training outside the firm. Other advantages of firms conducting the training themselves include: greater control over the quality of training; opportunities to tailor training to the particular needs of the enterprise; economies of scale for the larger sized firms; and greater opportunities for team building, reducing labour turnover and improving morale. In some instances there may be no feasible alternative because the training is not available outside the firm.

On the other hand, for some firms there may be economies of scale in sending employees to large, formal training programmes conducted outside the firm, the types of skills may be best delivered in a formal, off-job setting, or the firm may have more limited capacity to train on-the-job, without incurring major losses in productivity. For instance, within small firms it may be easier to buy training rather than undertaking training within the firm.

The points noted above suggest that there are likely to be significant differences in levels and types of training between firms, which reflect different needs and capacities to supply training. The commitment to training within an enterprise or industry is also likely to vary over time as the enterprise accommodates technological and occupational changes, and new work practices.

As a consequence, it is not useful to analyse under-investment in training by firms in terms of a simple dichotomy between "training" and "non training" firms or enterprises, nor is it useful to focus on whether the firm trains their employees or engages in "poaching" skilled workers from other firms.

General and Firm Specific Skills

The human capital approach suggests that it is important to consider the factors which underpin the training investment decision by the firm and the types of skills which firms are willing to invest in to increase productivity. The main premise is that firms are more likely to invest in training under the following conditions:

- where 'human capital' investments offer a comparable or higher rate of return than investments in physical capital;

- where benefits of investing in training exceed the costs and the firm is able to recoup its portion of the costs.

Central to the analysis is the distinction between general transferable skills and firm-specific skills, which are of little value to other firms. The human capital approach suggests that since skills are inseparable from the person and cannot be "owned" by the firm, firms will tend to invest in firm-specific skills. Employees who have received such training will be more limited in the number of alternative jobs open to them since the skills they have acquired do not raise productivity in other firms.

Employees have little incentive in firm-specific skills but will invest in skills which are portable, either between firms or within a particular industry, to enhance their mobility and future earnings.

There are some ways of harmonising these interests. Firms are more likely to provide or sponsor training if the risks of the investment can be shared between the firm and employees. The costs to employers include direct training costs as well as indirect costs such as losses in productivity while the worker is being trained. Employees may undertake part of the training outside working hours, or receive a lower wage during the training period as occurs when apprentices accept a lower wage in return for training which leads to a portable trades qualification. While the skills taught within apprenticeships are general rather than firm-specific, the firm protects its investment through a bond (the term of the indenture) and by paying lower wages during training to compensate for any loss in productivity.

Employee Turnover and Internal Labour Markets

While the human capital framework suggests that firms have little incentive to invest in training which assists individuals to acquire portable skills, firms may also invest in such training where they are able to secure their investment by other practices which reduce employee turnover. In these circumstances the nature of the skill is less important than the fact that the employee is likely to remain within the firm.

Dual labour market theories and internal labour market theories develop these ideas further, suggesting that investments in training are more likely to occur within internal labour markets since jobs within these markets generally involve a longer term commitment to employment by the firm and the employee. These theories suggest that internal labour markets encourage such relationships by limiting points of entry to employment within the firm, and encouraging internal promotion using career paths and other measures. If trained workers are likely to remain with the firm for longer periods, human capital investments by the firm therefore become more profitable. Employees may also have stronger incentives to invest in training within internal labour markets, particularly if they can bid up the cost of wages for firm-specific skills.

Analysing factors such as job turnover, recruitment and promotion and their relationship to human capital investments is also important because many skills, perhaps the vast majority, are learnt on-the-job. In fact, it may be argued that most people do not enter employment fully equipped with a set of skills for employment. While people may have acquired some 'human capital', this is augmented by learning further skills on the job. A further refinement of this idea is the suggestion that individuals "queue" for entry-level positions since these job openings provide opportunities for further training.

In contrast to the human capital approach, the training queue theory suggests that individuals use their human capital to obtain entry level positions and to signal their eligibility for further training within the enterprise rather than simply "selling" their skills in the labour market or "buying" training within employment by working for less than the market wage.

Training queue theories also emphasise the fact that there are constraints on individuals obtaining skills at an enterprise level since skills are acquired as part of a complicated job acquisition process. Institutional rules regulate supply and demand and play a major part in determining who receives further training opportunities.

Role of Trade Unions

As well as analysing training in terms of individuals and firms, it is useful to consider the effect of individuals acting collectively through trade union organisations to secure better wages and conditions of employment. Where wage increases are linked to the attainment of competencies rather than the actual job classification or length of tenure, there is an incentive for employees to acquire skills which result in higher pay. Trade unions may also be involved in negotiating specific training provisions within industrial awards which reduce the costs of undertaking further education and training to employees.

The role of trade unions in negotiating conditions of employment which minimise the risks of contract termination and reduce employee turnover is particularly important. As noted earlier, employee turnover is often an important factor in training investment decisions. Within firms with internal labour markets, trade unions are also likely to be actively involved in the development of career paths which provide a structure for training and career development.

Trade union activities may also reduce or restrict training opportunities in some instances, particularly when there are restrictions within industrial awards which deter people from acquiring further skills or using skills except within certain occupations.

Conclusion

In summary, firms may have little incentive to invest in training which equips workers with transferable skills between enterprises. Because there is less certainty about investments in 'human capital', firms may attempt to secure such investments through longer-term contractual relationships so that risks and benefits of training are shared. Both the specificity of the skills and the degree of employee turnover are likely to influence the willingness of the firm to pay for training. Trade unions may also play an important role within firms in securing training opportunities for employees.

GOVERNMENT

The Role of Government

The role of government in the provision of further education and training has come under scrutiny in recent years. While there is a general consensus that there is a definite role for government in the provision of education at pre-school, primary and secondary levels,

there is less consensus on the role government should play in further education and training.

It is clear that the role for government in the provision of further education and training differs from its role in relation to basic education for people up to the school leaving age. At the tertiary level the principal consumers are adults and firms who derive substantial private benefits from these training arrangements. Moreover, unlike initial education where consumption is compulsory, there is far more discretion over how and in what form education is consumed and those involved are more able to make their own investment decisions.

In relation to the bulk of skills acquisition which occurs on the job, the government has a more attenuated role since decisions on training within enterprises are likely to be made on the basis of considerations which are ultimately not within the government's sphere of influence. The role of employer and union organisations is likely to be of greater importance in these circumstances.

The governmental role which tends to receive the most attention is its role in funding and monitoring the provision of tertiary education. The aim of such activities is to improve the quality of the output and the responsiveness of institutions in receipt of state funds, including primary and secondary schools since this sector lays the foundation for subsequent training.

In addition, the government may perform other roles to encourage further education and training such as:

- improving information flows by via vocational guidance services and certification;

- improving access to capital markets for individuals via student loans;

- funding specific intiatives to help redress barriers to further education and training for particular groups, e.g. labour market schemes for the unemployed;

- providing an appropriate industrial relations framework which enables industry partners to address barrier to the acquisition and use of skills within employment;

- addressing other areas of government policy which may restrict training, eg immigration policies and occupational licensing; and

- offering inducements to industry to increase on job training including support for apprenticeships and traineeships.

The government's role in the funding and certification of further education and training in more detail.

Certification

The rationale for government involvement in the certification of further education and training is related to objectives which emphasise the importance of upgrading the general skills of the population. One way of assisting the skill formation process is for the government to improve the information flows within the post-school sector through certification arrangements.

Information on training outcomes is of greater importance in the post-school sector since unlike basic education, further education and training is delivered by a wide range of providers, and includes labour market training schemes and on-job training which are currently not well integrated in the training system. The underlying concern is that limited transferability of skills and qualifications may create rigidities both in the transition of young people to working life, and in further skills acquisition by adults.

The government may therefore assume a role in setting up certification arrangements which co-ordinate qualifications, establishing links between courses and qualifications offered by different providers to ensure that they dovetail with each other, maintaining national standards in awarding qualifications, and ensuring that there are flexible ways for individuals to gain qualifications and obtain recognition for competencies already achieved.

Certification is likely to be of greater value to individuals than to firms for a number of reasons. Adequate information is important for individuals to assist them in making choices, and to reduce the risks and uncertainty associated with the training investment decision. Providing clear pathways between different forms of training may increase the incentives for individuals to update or upgrade their skills, especially if the acquisition of skills is linked to higher pay.

The incentives are less clear for firms. There may be some gains in efficiency where certification arrangements result in more systematic training. A framework of qualifications which enables courses to be delivered as modules may also assist responsiveness and enable formal training to be undertaken more easily by those in employment. There may also be some gains in having a pool of skilled workers at an industry level. For example, there are advantages in having a skilled workforce for the hospitality industry since this helps to maintain consistency in the overall quality of the services provided to domestic and overseas tourists. Similarly, industries producing for the export market may

benefit from a common work force trained to high standards.

Firms also have a stake in ensuring that people receiving vocational qualifications are trained to agreed standards since this provides more accurate information to employers about prospective employees' abilities and may therefore reduce the uncertainties involved in hiring. This interest is reflected in the concern to ensure that certification authorities set standards and ensuring comparability in training outcomes.

It is important to note that the incentives for individuals and firms to participate in certification arrangements do not necessarily coincide. Analysing certification issues in terms of the human capital framework suggests that there are important tensions, since the most pronounced effect of improving certification is to increase the portability of skills. As noted earlier, the human capital approach suggests that the firm's incentive is to finance firm-specific rather than general, transferable skills so that it can secure its training investment and gain a higher return on the training it finances. To the extent that certification increases the portability of skills, the firm has less incentive to pay for such training or for the certification process itself.

Funding

The view that government should continue to have a major role in funding further education and training rests on the following propositions:

- that further education and training confers wider social benefits beyond those which accrue to individuals or to firms; and

- that reliance on private provision will not produce desirable outcomes in terms of equity or efficiency.

a) Social Benefits

In assessing who should fund further education and training it is generally accepted that there ought to be a relationship between those who derive benefit from further education and training (directly or indirectly) and those who finance the training. Thus, there has been some debate about whether the benefits of further education and training are captured largely by individuals and firms or whether there are wider social benefits which could justify a substantial level of state funding.

Wider social benefits may flow from of having a more educated, skilled workforce. Examining the performance of successful OECD economies suggests

there is an association between having a skilled, adaptable workforce and gains in productivity. It is not possible, however, to establish a direct causal link because of the difficulty of separating out the effects of institutional and cultural factors which may also contribute to economic growth within these economies.

There are also likely to be gains in terms of labour market adjustment. Further education and training may assist the workforce to deal effectively with technological and occupational change, encourage more rapid diffusion of knowledge and new technology, and foster innovation and research. Finally, it has been suggested that there is a need to take account of the long-term nature of 'human capital' investments which represent an investment in future generations who will derive benefit from a better educated current generation Other social benefits of further education have also been identified, including having more informed citizens, and a higher level of social tolerance arising from the transmission of a common cultural heritage.

The alternative view is that the main beneficiaries are individuals or firms and there are no or limited third party effects. This view suggests that individuals capture most of the consumption and investment benefits from undertaking further education and training. For instance, it may be argued that a university graduate may capture the benefits through higher life-time earnings, and non-pecuniary benefits such as higher prestige, increased self confidence and the ability to influence political decisions. Individuals may also receive the benefits of any spillovers - for example, the benefits of being a member of a well-educated society.

It is difficult to assess the size and value of the private and social benefits in any precise way, partly because many social benefits are intangible and are therefore difficult to measure. Assessing private benefits it is also difficult because of problems in isolating the benefits which are due to education from other factors which affect earnings.

Nevertheless, it is reasonable to assume that the benefits cannot be assigned completely to firms or to individuals. At the same time, it is likely that the private returns are higher for further education and training than for basic education. The returns from human capital investments also seem to compare favourably with returns to physical capital - a view which is supported by some overseas and New Zealand studies of rates of return from higher education. In summary, if there are private as well as wider social benefits from further education and

training, it is appropriate that the funding arrangements reflect this balance, with some funds contributed by individuals and some funds contributed by way of government subsidies.

Similarly, because there are wider benefits than those which accrue to individuals or firms, the method of funding and the accountability arrangements for further education and training may be partly consumer-driven, but will tend to stop short of advocating a "pure" market approach. Discussion of the merits and drawbacks of using an educational voucher system illustrates this point.

Under a pure voucher system tertiary institutions would draw their revenue directly from students and would therefore be more accountable to consumers. On the other hand, there are difficulties associated with using such a system as the main method of ensuring accountability. These include limits on the ability of dissatisfied customers to seek other alternatives because of the long-term and often one-off nature of human capital, investments and information problems which present difficulties for consumers in assessing the value of the service on offer. The presence of wider social benefits also suggests that the government has an interest in regulating the allocation of funds and the delivery of educational services rather than leaving such decisions solely to individuals and firms.

b) Equity

The government may also fund further education and training as part of its role in promoting equal educational opportunities. A certain level of state funding can assist in making services accessible and affordable to all and encourage those groups who are currently underrepresented to take part in further education and training. As noted earlier, there are reasons why purely private provision may disadvantage certain groups, in particular those who have less access to information or finance.

These barriers may be addressed by providing direct subsidies for institutions, as well as targeted funding to those from disadvantaged backgrounds, or a combination of both methods. While individuals may be required to meet a portion of the tuition costs, the government may also intervene to reduce the risks to students by providing maintenance grants, student loans or through the imposition of a graduate tax which enables individuals to make repayments once they are receiving a certain level of earnings.

CONCLUSION: THE NEW ZEALAND POSITION

Many of the issues discussed above are still under discussion or require further policy development work. Nevertheless, the general direction of reform is clear and some major changes are now under way. These are outlined below.

Funding and Accountability Mechanisms

Recent reforms in the funding of further education and training have been aimed at re-apportioning the costs so that individuals and employers contribute a greater share. This approach recognises that there are benefits which accrue to individuals from further education and training, and that it is therefore not unreasonable to seeking a greater financial contribution from them.

Students are therefore being asked to pay some portion of the tuition costs. This change has been interpreted as "user pays" financing of further education and training, but such a view ignores the fact that the Government will continue to provide the major portion of funding to educational institutions, as well as providing student income support allowances, and a flat fees structure so that costly courses are affordable to all. The present government has accepted that there are important reasons why it should maintain its present role as principal funder of post-school education and training and, in some instances, the full-costs of courses may be subsidised on equity grounds.

Increasing the financial contribution from employers is also being considered. Reforms have been introduced to improve the ability of institutions to generate income by altering their legal status and encouraging them to supplement their income through private sources, for instance by developing employer sponsored courses and marketing their services to overseas students.

A second major objective of the recent reforms has been to improve the management of the existing resources spent on education to ensure that the services provided are effective, efficient and responsive. This objective has partly been achieved by restructuring the Department of education and transferring relevant training functions from other departments. A Ministry of Education has been set up primarily as a policy ministry - not an operational department - and will provide comprehensive policy advice on Education and training. For the first time, policy development will be able to encompass all aspects of the post-compulsory sector: it will include the universities, the polytechnics, colleges of education, non-formal education and training, on-the-job training, the labour-market-training programme of Access, and also the apprenticeship system.

A major dimension of the reform process is to improve the actual funding mechanisms. There will be a new mechanism for government funding, based on a common formula, which will allow an even-handed approach to institutions and different forms of education and training. Secondly the new system is designed to free up the funding to providers. In the past institutional funding was determined centrally and decisions were based largely on the calculation of inputs to the system and historical allocations. Under the new system, state funded tertiary institutions will receive bulk grants decided on a rolling triennial basis. The size of the grant will be determined on the basis of projected student numbers, with special allocations to achieve equity objectives. Institutions can also supplement their grant with other income without having such funds deducted from their allocation. The aim is to give institutions more freedom to make decisions but to hold institutions to account for the use of their resources, to strengthen the incentives for institutions to practice good management of resources including staffing, and encourage responsiveness to local community and labour market needs.

The new system of funding includes more 'market' mechanisms to encourage a more direct relationship between providers of services and the consumer, and to encourage institutions to be more entrepreneurial and profit-oriented. Thus some funds are being made available on a contestable basis, and institutions are being encouraged to generate additional revenue from non-government sources through endowments, commercial sponsorships and charging full fees for some courses. The level of student fees has also been increased relative to proportion of funding which flows to institution from direct institutional grants.

At the same time, there has been a concern to preserve the benefits which result from a publicly funded education system. As a consequence, various safeguards have been built in to ensure that profit-oriented activities do not reduce access to education for New Zealanders and that equity is addressed.

It is also clear that while there was dissatisfaction with some of the traditional forms of bureaucratic accountability, there has been a move to build on the strengths of formal accountability mechanisms as well as using more market approaches. More extensive use is being made of the following methods to improve accountability:

- contractual relationships to specify the outputs being purchased by government through charter documents and operational plans;

- sanctions for poor performance if objectives in the operational plans have not been met;

- external review to monitor the performance of tertiary institutions receiving public funds (through an independent review and audit agency);

- public scrutiny of the operation of institutions through the publication of charter and operational plans of institutions;

- course advisory committees with labour market representation to advise on training needs and improve information flows; and

- strengthening the representation of labour market and community interests on governing boards of educational institutions and national advisory committees to provide more direct links between consumers and providers;

Certification

A National Education Qualifications Authority (NEQA) has been set up to provide an across-the board approach to the validation of qualifications in schools, and in vocational and advanced academic areas. The aim is to simplify the present system of qualifications and improve the ability of those studying to move between different courses and institutions in pursuit of their qualifications. It also aims to recognise competence at whatever level.

NEQA will also undertake accreditation of providers in receipt of government funds, accreditation of certain private providers and the assessment of overseas qualifications, and administer some funds for the development of training needs analyses within industry.

Employer Contribution to Training

New policy proposals in this area are still under consideration by the Government. A Working Group on Employer Contribution to training has been examining various ways of increasing the employer contribution more to training, including looking at such approaches as,industry training levies a minimum expenditure requirement.

Labour Market Training

As part of the reformed system, the new Ministry of Education will offer comprehensive policy advice on education and training, including advice on labour market programmes. Responsibility for administration and servicing of labour market training and apprenticeship systems has been transferred from the Department of Labour to a free-standing Education and Training Support

Agency working under contract to the new Ministry of Education.

At least part of the objective behind such reforms is to strengthen the links between labour market training and other parts of the training system, including arrangements for the certification of training. There is also a need to maintain and improve linkages between labour market training and the placement service offered by the New Zealand Employment Service within the Department of Labqur. Another way of improving the linkages between training within the Access and MAccess programmes and employment is to increase the proportion of work-based training carried out within these programmes, since work-based training options tend to result in a higher proportion of placements into employment.

The MAccess programme is being re-examined in the light of the need to deliver the programme through a network of iwi (tribal) authorities. Following the restructuring of the Department of Maori Affairs, a Ministry of Maori Affairs was set up on 1 September 1989. The Ministry is responsible for advising on government policies for Maori. Funding and administration of the services and programmes to the Maori community have been devolved to the Iwi, although an Iwi Transition Agency, has been set up in the interim to manage the devolution of authority to iwi over the next five years.

Unemployment benefit rates and student allowances have been aligned as part of the Government's new unified system of youth support. Sixteen and seventeen year olds receive a youth support payment, whether they are at school, unemployed or on a labour market course. Under the system, payments for 16 and 17 year-olds are targeted on family income, and payment for 18 and 19 year-olds is partly targeted on family income and partly universal. For people over the age of 20, the rates of support have also been standardised to remove anomalies in payment rates which acted as a disincentive to undertaking further education and training.

Apprenticeship Reform

The Government's reform process aims to improve the quality of apprenticeship training by encouraging more systematic training and competency-based assessment. Streamlining procedures for the recognition of skills and competencies through the certification system is also likely to benefit apprenticeship training, particularly in developing modules within training programmes as new training needs emerge.

The position of women's entry into trades is also being reviewed in early 1990 to examine appropriate ways of assisting women to enter apprenticeships.

Vocational Guidance and Careers Advice

A new Vocational Guidance and Careers Advisory agency has been set up to provide occupational, education and training information as well as consultancy services on careers advisory functions. The agency operates as a free-standing board but is contracted to the Ministry of Education.

Industrial Relations

The introduction of the Labour Relations Act 1987 and the transition to new industrial relations institutions have led to significant changes in the industrial relations environment. Labour relations have been reformed to provide trade unions and employers with greater scope to negotiate changes, including agreements on training, as part of the industrial bargaining process.

Key aims of the Act are to promote the amalgamation or restructuring of unions and competitive union coverage; to continue voluntary arbitration in wage-fixing, which was established in 1984, to provide an appropriate framework for employers and unions to enter either an award or an agreement, the terms of which are is binding on both parties; and to require unions and employers to enforce their own awards and agreements rather than resorting to compulsory conciliation and arbitration.

NZ CERTIFICATE CANDIDATES WITH SUBJECT COMBINATIONS IN THE FIELDS OF MATHEMATICS AND SCIENCE BY SEX: 1987

Subject Combinations	M %	F %	Total %
Maths and no sciences	10.3	13.8	12.1
Maths and only 1 science	72.1	69.6	70.8
Maths and 2 or more sciences	10.4	5.8	8.0
1 science and no maths	5.2	7.1	6.2
2 or more sciences & no maths	0.2	0.4	0.3
No maths or sciences	1.8	3.4	2.6
All candidates	100.0	100.0	100.0
Number of Candidates	22401	23334	45735

Source: School Certificate Examination Statistics 1987

THE TEN MOST POPULAR SUBJECTS FOR 'FIRST YEAR FORM 5' AND 'MAORI FIRST YEAR FORM 5' NEW ZEALAND SCHOOL, SCHOOL CERTIFICATE CANDIDATES: 1977 AND 1987

(The percentage is based on the number of pupils who entered/sat each subject compared with the total number in the appropriate candidate group.)

'FIRST YEAR FORM 5' CANDIDATES				'MAORI FIRST YEAR FORM 5' CANDIDATES			
1977 #		1987 $		1977 #		1987 $	
Subject	%	Subject	%	Subject	%	Subject	%
English	99.1	English	96.4	English	98.3	English	92.9
Mathematics	78.1	Mathematics	83.9	Mathematics	60.1	Mathematics	67.8
Science	60.9	Science	69.1	Geography	46.9	Science	51.3
Geography	54.8	Geography	37.4	Science	45.6	Geography	33.8
History	24.4	Economic Studies	27.0	Biology	24.1	Maori	24.1
Technical Drawing	22.8	Typing	20.4	Maori	23.1	Typing	22.4
Biology	22.0	Accounting	20.4	Typewriting	22.4	Economic Studies	17.2
Typewriting	18.3	Technical Drawing	18.5	Technical Drawing	19.3	Art	15.6
Economic Studies	16.7	History	15.2	History	18.3	Accounting	13.4
Art	12.6	Art	14.4	Art	14.6	Home Economics	13.1
N = 51,069		N = 51,627		N = 4,454		N = 6,359	

1977 data is based on the number of candidates entered
$ 1987 data is based on the number of candidates sat.

Roll Numbers of Full-year Students at Educational Institutions at 1 July

Level of Education	*1985*	*1986*	*1987*
PRE SCHOOL—(Aged >2½ years)			
Non-profit making groups	3 041	3 879	3 612
Pre-school classes at primary schools	1 044	1 052	983
Correspondence School	488	713	749
Playcentres	14 923	14 509	14 412
Kindergartens	41 170	41 822	41 971
	60 666	61 975	61 727
PRIMARY—(Juniors to Form 2)			
Primary schools	352 954	344 907	340 631
Intermediate and attached Intermediate schools	72 817	69 824	66 178
Area schools (juniors to F2)	6 580	5 964	5 502
Form 1 and 2 at form 1–7 schools	7 160	6 995	6 963
Correspondence School	1 599	1 606	1 696
Departmental special schools	224	201	259
Department of Social Welfare schools	40	46	39
Royal NZ Foundation for the Blind	61	68	93
Private primary schools	10 991	11 417	11 611
	452 426	441 028	432 972
SECONDARY—(Form 3 to 7)			
Secondary schools	214 518	214 300	215 739
Area schools (form 3 to 7)	3 199	3 191	3 097
Correspondence School	1 053	1 109	1 190
Departmental special schools	370	330	214
Department of Social Welfare schools	296	266	214
Private secondary schools	11 534	11 816	11 853
	230 970	231 012	232 307
TERTIARY—(Post-secondary education)			
Continuing education at:			
Technical Correspondence Institute	31 949	33 598	34 802
Polytechnics‡—			
Full-time students	8 356	9 443	11 153
Part-time students	35 194	35 522	32 882
Classes at Secondary Schools§—			
Part-time students	52 701	49 095	45 427
	128 200	127 658	124 264
Teachers Colleges—			
Teacher training	2 644	3 375	3 921
Post-graduate specialist courses‖	59	87	80
	2 703	3 462	4 001
Other full-time courses at teachers colleges	142	91	170
Universities—			
Full-time internal students	34 431	35 177	37 074
Part-time internal students	13 368	14 188	14 965
External students	11 324	12 614	14 396
	59 123	61 979	66 435
Grand totals	934 230	927 205	921 876
Percentage of 1 July population	28.7	28.6	28.2

This table relates only to full-year enrolments both full-time and part-time.

‡ Includes technical institutes, and community colleges.

§ At secondary schools, 1 intermediate and Correspondence School.

‖ Courses taken by certificated teachers in education of the deaf, education of the handicapped, bilingual and advisers on deaf.

Source: Department of Education Annual Report for the year ended 1988.

Enrolments in Continuing* Education

Year	No. of Students enrolled in full year courses					Enrolments in part year courses								
	†Full time at Polytechnics	Part time at Polytechnics	Part time at Technical Correspondence Institute	Part time at Secondary School	Part time at University	‡Short Courses at Polytechnics	‡Short Courses at Secondary Schools	‡Short Courses at University	§Seminars at Polytechnics	§Seminars at University	‖Block Courses at Polytechnics	Professional College Courses at University	New Zealand Playcentre Federation Short Courses	
1980	6 842	37 659	28 566	72 008		33 637			21 406		32 158	..	..	..
1981	6 915	35 849	30 091	67 851		45 624	25 347		21 948		29 582	..	..	..
1982	7 330	36 210	29 837	64 197		51 465	38 441		21 794		35 299	..	..	..
1983	7 956	37 584	29 899	69 545		64 250	48 806		20 423		38 363	..	..	..
1984	8 195	36 217	29 757	64 488		68 723	59 648	..	28 458	..	38 758	..	..	..
1985	8 356	35 194	31 949	52 701		79 201	66 044		33 596		37 979	..	..	..
1986	9 443	35 522	33 598	49 095	569	77 937	84 370	10 484	31 311	17 529	35 328	493	2 397	17 918
1987	11 153	32 882	34 802	45 427	1 444	82 877	113 505	10 543	29 965	17 583	41 747	573	2 026	18 544

* Continuing education here refers to post-school education funded by the Department of Education excluding universities and teachers colleges.

† Polytechnics include technical institutes and community colleges

‡ Short courses involve part-time attendance for less than 26 weeks

§ Seminars involve full-time attendance for less than a week

‖ Block courses involve full-time attendance for 1 week or more

.. Not available

Enrolments in Teacher Training and Other Approved Courses at Teachers Colleges at 1 July

Year	Full year Full time teacher training							Other Approved Courses at Teachers Colleges		
	Kindergarten Trainees	Primary Trainees		Post Graduate Specialist Course EOH & EOD* & Bilingual	Secondary Trainees		Full year Full time	Block Courses‡	Higher and Advanced Diplomas of Teaching
	Div E	At College†	At University		At College	At University			
1980	281	4 079	275	52	1 507	1 433	..	..	..
1981	289	4 164	231	57	1 391	1 362	..	..	..
1982	234	3 254	227	53	923	923	39	350	915
1983	213	2 482	219	57	677	668	75	352	1 222
1984	183	1 814	219	54	544	393	123	450	2 364
1985	154	1 947	136	59	543	319	142	672	2 662
1986	211	2 421	55	87	743	364	91	643	2 254
1987	324	2 806	80	80	791	375	170	626	2 714

† Division A. Speech and Pacific Island Supplementary Training students

* EOH means education of the handicapped. EOD means education of the deaf.

‡ Block courses involve full time attendance for 1 week or more, e.g., nursing tutors, library studies

.. Not available

— Not applicable

Source: Department of Education Annual Report for the year ended 1988.

SUMMARY OF ENROLMENTS IN CONTINUING EDUCATION COURSES BY LEVEL OF EDUCATION FOR 1987

Course	Polytechnics										T.C.I.		Teachers College		Secondary Schools*				Correspondence School	
	Full-year Full-time Courses		Full-year Part-time Courses		Block Courses		Short Courses		Seminars		Full-year Part-time Courses		Full-Year Full-time Courses		Full-year Part-time Courses		Short Courses		Full-year Part-time Courses	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Level 2 **	8	10	-	-	-	-	-	-	-	-	-	-	-	-	30	207	-	-	1043	3258
Level 3																				
Trade Certificate	-	-	6759	1099	22743	3081	427	1505	177	17	9198	1102	-	-	107	488	-	-	-	-
AAVA Technicians Certificate	-	-	63	12	1193	84	-	-	-	-	1168	116	-	-	3	-	-	-	-	-
Other	745	2384	1213	1291	1451	666	1626	438	241	113	5403	3267	5	95	2346	5347	-	-	2646	6105
Level 5																				
Advanced Trade Certificate	-	-	865	38	540	2	-	-	-	-	1523	18	-	-	-	2	-	-	-	-
AAVA NZ Certificate	929	270	4738	1400	2021	258	8	2	-	-	3116	613	-	-	-	-	-	-	47	13
Other	1417	5390	2954	2663	618	627	4051	3752	-	-	5859	3419	15	55	-	-	-	-	-	-
Level 9	-	-	3828	6862	5054	4354	25286	44823	14060	15357			-	-	7194	20059	30217	83288	595	1078
TOTAL	3099	8054	20420	13365	33620	9072	31398	50520	14478	15487	26267	8535	20	150	9680	26103	30217	83288	4336	10454

Note: The numbers of part-time students include some students who are enrolled in more than one course.

* Includes one Intermediate School.

** See attached notes for definition of levels.

Definitions:

Block Courses = a course involving continuous periods of full-time attendance for 1 week or more for an unchanging group of students

Short Courses = a course involving part-time attendance for less than 26 weeks of the year

Seminars = a course involving continuous periods of full-time attendance for less than 1 week for an unchanging group of students

AAVA = Authority for Advanced Vocational Awards

T.C.I. = Technical Correspondence Institute.

Source: Educational Statistics of New Zealand 1988.

Notes to Table

Level 0 Early childhood education

Level 1 Primary schooling up to standard 4

Level 2 Forms 1 to 4

Level 3 Forms 5-7. This level also includes continuing education courses which do not go beyond form 7 level and which do not require Sixth Form Certificate as a minimum entrance qualification. Included in this level are most apprenticeship courses for the Trades Certification Board (TCB), and the Technicians Certificate courses conducted by the Authority for Advanced Vocational Awards (AAVA).

Level 5 Education Leading to an award not equivalent to a university degree. This level includes continuing education courses at a level beyond form 7, many of which require Sixth Form Certificate as a pre-entry qualification. University diplomas, teachers college courses, Advanced Trade Certificate and the New Zealand Certificate courses prescribed by the AAVA are included at this level.

Level 6 All study towards a degree or its equivalent, including intermediate courses in fields such as medicine and engineering.

Level 7 Post-graduate courses.

Level 9 Education not definable by level. This relates to out-of-school education for which no well-defined educational prerequisites are specified. It includes community and hobby classes, many extramural university courses, and study at institutions such as the Workers Education Association (WEA). Only those level 9 courses offered by polytechnics, secondary schools and by one intermediate school are shown in the tables.

SUMMARY OF COURSES TAKEN BY UNIVERSITY STUDENTS AT 1 JULY 1987

Course	Internal Students				External Students		TOTAL ALL STUDENT			Overseas Students Included	
	Full-time Students		Part-time Students								
	M	F	M	F	M	F	M	F	TOTAL	M	F
ost-graduate Degrees, Diplomas Certificates and Other Courses											
D Degrees	590	280	215	90			805	370	1175	146	39
Intern	1074	797	486	396	62	37	1622	1230	2852	179	99
achelors Honours Degrees	593	531	36	34	1	1	630	566	1196	23	32
Bachelors Degrees	20	7	5	9	23	15	48	31	79	-	1
Post-graduate Diplomas	301	271	198	198	463	562	962	1031	1993	95	29
st-graduate Certificates	25	23	43	33		3	68	59	127	3	4
st-graduate Other Courses	74	56	59	25	5	2	138	83	221	7	4
Sub-total	2677	1965	1042	785	554	620	4273	3370	7643	453	208
Under-graduate Degrees, Diplomas, Intermediates, Certificates and ther Courses											
chelors Degrees	17118	13945	3727	6444	2870	5241	23715	25630	49345	1053	804
Under-graduate Diplomas	763	428	176	172	1137	1066	2076	1666	3742	53	47
Under-graduate Certificates	22	9	209	570	44	112	275	691	966	15	4
der-graduate Other Courses	51	44	86	84	6	1	143	129	272	4	2
termediate Courses	1523	734	79	51	-	-	1602	785	2387	54	21
Sub-total	19477	15160	4277	7321	4057	6420	27811	28901	56712	1179	878
rtificate of Proficiency Papers	276	190	878	826	1024	1722	2178	2738	4916	75	48
Personal Interest	38	19	42	80	-	-	80	99	179	9	3
Sub-total	314	209	920	906	1024	1722	2258	2837	5095	84	51
TOTAL	22468	17334	6239	9012	5635	8762	34342	35108	69450	1716	1137
Adjustment for students enrolled in more than one course	1506	1222	153	133	1	0	1660	1355	3015	48	29
TOTAL STUDENTS	20962	16112	6086	8879	5634	8762	32682	33753	66435	1668	1108

ource: Education Statistics of New Zealand, 1988.

First Degree - First Year Students
by Courses, 1975-1986

	1975	1980	1985	1986	% Incr 1975-86
Education	646	703	456	718	11.1
Engineering	392	391	439	480	22.4
Medicine	193	256	246	272	40.9
Science	1188	1541	1648	1745	46.9
Arts	3131	3132	4328	4645	48.4
Agric./Hort.	459	746	733	710	54.7
Law	450	582	680	840	86.7
Commerce	1125	1791	3205	3555	216.0
Comp. Science	781	2264	4529	5095	552.4

Source: *UGC Annual Report to Parliament*, 1986

Enrolment of Women in New Zealand Universities
- Internal Students

Year	Full-time		Part-time		Total	
	No.	%	No.	%	No.	%
1965	3343	24.5	1989	30.1	5332	26.1
1970	6020	25.8	3578	41.7	9598	30.1
1975	8358	32.3	5443	49.2	13801	37.4
1980	11452	37.0	6927	53.5	18379	41.8
1986	15034	42.7	8393	59.2	23427	47.5

Source : University Statistical Returns (Watts Report, 1988)

Enrolment Trends of Women in Selected Faculties
- First Degree and Diploma Courses 1970-1986

Faculty	1970	%	1975	%	1980	%	1986	%
Agric./Hort.	70	5	124	15	135	21	858	29
Architecture	7	3	64	19	62	18	176	26
Arts	5723	54	6940	61	7608	66	12060	66
Commerce	242	7	671	17	1497	24	3353	36
Dentistry			43	19	63	27	83	37
Education	680	71	1299	72	1742	78	1472	82
Engineering	10	1	31	2	44	3	132	7
Law	207	10	580	25	821	35	1721	45
Medic./Dental	89	11	309	28	420	34	688	43
Science	1189	23	1300	28	1749	32	2034	35
Vet. Science	16	9	50	21	75	32	227	54
Total	8233		11411		14216		22804	

Commerce - includes Business Studies
Arts - includes Music, Fine Arts, Social Science, Social Work and Humanities

Source : University Statistical Returns (Watts Report, 1988)

STUDENTS AT NZ UNIVERSITIES IN 1987 BY ETHNIC GROUP
(% Distribution)

Ethnic Group	Internal Students Full time	Part Time	External	New Zealand Population
Maori	3.2	5.4	3.2	12
Pacific Islander	2.8	2.1	2.0	4
European/Other	94.0	92.4	94.7	82

Source: Haines (1988), New Zealand Planning Council

Notes: Uses self classification of ethnic group)
Based on University Grants Committee, unpublished material.

NZ STUDENTS - DISTRIBUTION OF FATHERS' SOCIO-ECONOMIC STATUS (%)

	1	2	3	4	5	6
School Form 3		20	27	27		24
School Form 7		51	26	17		6
Otago Medical School	40	25	18	14	1	1
Auckland University	28	29	20	16	4	3
Teachers College	22	31	24	14	3	6
Technical Institute	11	20	24	24	10	10

Source: Haines (1988), New Zealand Planning Council

Notes: Uses Elley-Irving index of socio economic status, (1=highest, 6=lowest)
Based on Auckland University Data: Jones (1988), remaining data, The Treasury, 1987).

Education Finance

Year Ended 31 March	Net Education Expenditure	Proportion of GDP	Net Government Expenditure	Proportion of Net Government Expenditure
	($M)	%	($M)*	%
1974	440.2	4.8	2,679.3	16.4
1975	526.6	5.2	3,462.2	15.2
1976	627.0	5.4	4,444.3	14.1
1977	699.4	5.0	4,578.2	15.3
1978	807.5	5.2	5,668.7	14.2
1979	929.3	5.3	6,848.4	13.6
1980	1,009.3	4.8	7,586.7	13.3
1981	1,292.0	5.3	9,245.6	14.1
1982	1,493.2	5.1	11,196.5	13.3
1983	1,638.8	5.1	12,672.5	12.9
1984	1,674.3	4.9	14,250.0	11.8
1985	1,728.6	4.5	15,317.6	11.3
1986	2,010.3	4.6†	17,672.5	11.4
1987	2,595.2	5.1‡	20,945.1	12.4
1988	3,118.2	5.3‡	23,116.1	13.5

* Net Government expenditure as per Table No 1, Functional Classification of Government Expenditure as derived from the annual Financial Statement of the Minister of Finance

† Provisional

‡ Estimated

Source: Education Statistics of New Zealand, 1988.

Government Spending on Post-School Education

Year	Teacher Education		Technical Education		University Education		Total	
	Actual $000[1]	Constant $000[2]	Actual $000[1]	Constant $000[2]	Actual $000[1]	Constant $000[2]	Actual $000[1]	Constant $000[2]
1975/76	47 377	215 440	44 039	200 262	104 279	474 195	195 659	889 897
	−6.7%	−6.1%	+18.8%	+4.5%	+17.9%	+3.9%	+15.3%	+1.4%
1976/77	50 553	202 212	52 313	209 252	122 695	490 780	225 561	902 244
	+4.3%	−3.5%	+7.6%	−6.1%	+14.5%	−0.1%	+10.7%	−3.4%
1977/78	52 933	184 976	56 273	196 444	140 508	490 501	249 769	871 921
	+9.0%	−1.3%	+19.1%	+7.8%	+13.7	+2.9%	+13.9%	−9.9%
1978/79	57 775	182 514	67 007	211 678	159 796	504 303	284 578	785 270
	−0.8%	−16.0%	+19.8%	+1.3%	+11.6%	−5.7%	+11.0%	+7.5%
1979/80	57 339	153 140	80 284	214 422	178 320	476 255	315 943	843 817
	+8.1%	−6.3%	+27.2%	+10.3%	+16.7%	+1.2%	+17.8%	−2.1%
1980/81	61 978	143 563	102 086	236 467	208 040	481 994	372 104	861 925
	+2.0%	−11.9%	+19.6%	+3.2%	+13.5%	−2.0%	+13.2%	+2.2%
1981/82	63 205	126 410	122 061	244 122	236 121	472 242	421 387	842 774
	−16.9%	−26.2%	+12.3%	+0.2%	−8.3%	+3.8%	+5.8%	−6.0%
1982/83	52 537	93 303	137 742	244 623	255 736	454 175	446 015	792 101
	−14.4%	−17.3%	+2.6%	−0.8%	+7.1%	+3.4%	+3.2%	−0.3%
1983/84	44 952	77 137	141 346	242 548	273 798	469 834	460 096	789 519
	−19.6%	−29.1%	+5.1%	−7.3%	+5.6%	−6.9%	+3.0%	−9.2%
1984/85	36 147	54 695	148 606	224 861	289 178	437 565	473 931	717 122
	+13.6%	+0.6%	+21.7%	+7.7%	+24.9%	+10.6%	+23.0%	+8.9%
1985/86	41 075	55 021	180 804	242 193	361 117	483 729	582 996	780 943
	+45.3%	+22.9%	+42.9%	+20.8%	+17.4%	−0.7%	+27.3%	+7.6%
1986/87	59 694	67 596	258 305	292 497	424 005	480 131	742 004	840 255
	+28.0%	+17.4%	+44.7%	+32.3%	+20.4%	+10.5%	+29.5%	+18.3%
1987/88	76 379	79 364	373 828	388 439	510 441	530 392	960 648	998 196
	+24.1%	+19.4%	+21.2%	+16.6%	+16.7%	+12.3%	+19.0%	+14.5%
1988/89 Est.	94 799	94 799	452 965	452 965	595 528	595 528	1 143 292	1 143 292

Notes: [1]in dollars of the day.
[2]in constant March 1989 dollars—based on forecast March 1989 CPI figure supplied by the New Zealand Institute of Economic Research.

TRAINING MEASURES

SCHEME ADMINISTRATOR	PURPOSE	TARGET GROUP	TARGETING CRITERIA	DELIVERY-WHAT	DELIVERY-HOW	HISTORY AND REVIEW DETAILS
ACCESS (DOL)	Equip targeted individuals who are disadvantaged in the labour market with the skills they need to enter further education or training or employment.	Individuals who are disadvantaged in the labour market and are identified as lacking skills.	Trainees assessed against targeting factors. Strongly targeted to registered unemployed but points also take account of education level, recent school leaving, single or widowed parent, women's training in non-trad occupations, and significant history of unregistered unemployment.	Access courses provided by community organisations, polytechnics, employers, or other approved training organisations. Courses vary from 4-52 weeks. Average duration 12 weeks. Includes life skills, vocational and work-based training. Includes ACCESS training allowances for trainees.	Administered regionally by 21 Regional Employment and ACCESS Councils who fund courses to meet the needs of the local labour market and the target group.	Began April 1987. Access Review 1987 (internal). Computer systems and payments reviews 1988 (Price-Waterhouse and an internal review). Access charter & Access Training Scheme Act 1988. Audit Report (Access & MACCESS) 1989. Targeting review underway. Ethnicity 'point' removed July 1989.
MACCESS (DMA & subsequently Iwi Transition Agency)	Equip targeted individuals who are disadvantaged in the labour market with the skills they need to enter further education and training or employment.	Targeted to people disadvantaged in the labour market but catering predominately for Maori, especially young Maori.	Tribal authorities pay a set fee per training place instead of varying payments according to the number of targeting factors.	MACCESS courses and training allowances for trainees. Includes life skills, vocational and work-based training. Includes ACCESS training allowances for trainees.	Delivered by 23 tribal/ regional authorities who fund courses to meet the needs of the target group and the local labour market.	Began January 1987 Audited 1988 & 1989.
MAORI & PACIFIC ISLAND RECRUITMENT PROGRAMME (DMA)	Affirmative action programme to increase the number of Maori & Pacific Island people in the public service.	Maori or Pacific Island people, who under normal circumstances, would have difficulty in obtaining worthwhile employment.	Maori or Pacific Island people. School leavers or people who left full-time secondary education within 2 years. Must have at least 3 years secondary education and have other qualifications required by the employment Department.	Full wage subsidy paid by DMA. Any extra charges are met by the employing Department. e.g. Higher duties allowances, travel, accommodation, levies.	DMA screens recruits for referral to Depts.	Began 1980 as Pacific Island Clerical Recruitment Prog. Reviewed by SSC 1986. Redesignated M & P Island Recruitment. Reviewed 1989. Paper to Cabinet on future of scheme.

TRAINING MEASURES

SCHEME ADMINISTRATOR	PURPOSE	TARGET GROUP	TARGETING CRITERIA	DELIVERY-WHAT	DELIVERY-HOW	HISTORY AND REVIEW DETAILS
PRE-TRADE & VOCATIONAL TRAINING COURSES (DMA)	Affirmative action programme to assist Maori & Pacific Island youth to obtain further education & employment.	Maori or Pacific Island people, who, under normal circumstances, would have difficulty obtaining employment or training.	Maori or of Pacific Island descent. School leavers who would have difficulty obtaining employment. Must have at least 3 years secondary education.	One year pre-trade & vocational courses and training allowances (equivalent to MACCESS) as well as boarding and travel, where appropriate.	Allocation of special funding to polytechnics. DNA recruits potential trainnes and provides trainee allowance payments. Selection of course participants by DMA/DOE.	Began 1959. Initially both courses & training allowances funded by DMA. Subsequently special funding was allocated through VOTE : Education with DMA providing trainee allowance payments.
LIMITED SERVICE VOLUNTEERS (DOL)	Provide basic training for young people to enhance their prospects of obtaining employment or entering further training.	Targeted to young people (17-19¾ years). Registration with NZES.	Age registration with NZES.	Basic training with the Armed Forces. Basic training and trade skills. 3 intakes per year.	Fee per trainee week (currently $300) is paid to Ministry of Defence. Fee includes training allowances, accommodation, travel and training fees.	Began 1983, was funded under Training Assistance Programme. Funded centrally since 1986 from LSV budget.
FOUNDATION COURSES (DOE)	Introduce students to a range of occupations in a particular vocational area so that students can obtain entry to further education and training or go directly into employment.	Oriented to people who may not qualify for an established polytechnic course, or who may not gain sufficient targeting points to get onto an ACCESS course.	Polytechnics are responsible for the selection of participants. Required to ensure participation of women, Maori and Pacific Island peoples.	Polytechnic courses 12-32 weeks in duration (average 20 weeks).	Allocation of special funding to polytechnics for the provision of courses. Courses developed by polytechnics in conjunction with advisory committees.	Foundation courses approved (July 1986). 32 foundation courses approved (Nov 1986). $30 million package for foundation, ER & others (July 87). Further funding as part of $10m package (July 88).

TRAINING MEASURES

SCHEME ADMINISTRATOR	PURPOSE	TARGET GROUP	TARGETING CRITERIA	DELIVERY-WHAT	DELIVERY-HOW	HISTORY AND REVIEW DETAILS
EMPLOYMENT RICH COURSES (DOE)	Mount courses in specific employment areas where there are known skill shortages and job vacancies.	Jobseekers interested in the skills train- provided. Aimed at 'job ready' job- seekers.	Polytechnics are respon- sible for the selection of participants. Required to ensure participation of women, Maori and Pacific Island peoples.	Polytechnic courses 12-32 weeks in duration (average 20 weeks).	Allocation of special funding to polytechnics for the provision of courses. Allocation formula based on regional unemploy- ment, population and numbers in 15+ age group. Courses developed by polytechnics in conjunction with advisory committees.	Ongoing evalua- tion. Internal monitoring for equity and outcomes.
BRIDGING COURSES (DOE)	Mount specific courses to assist individuals to reach the level of entry requirement for further education and training, or the job of their choice.	People with educat- ional barriers which prevent participation in further education and training. Especially those with few secondary qualifications.	Polytechnics are responsible for the selection of participants. Required to ensure participation of women, Maori and Pacific Island peoples.	Polytechnic courses 12-32 weeks in duration (average 20 weeks).	Conducted by polytechnics.	
FEMALE APPRENTICE INCENTIVE FOR RECRUITMENT SCHEME (DOL)	Promote the apprenticeship of females in non- traditional industries.	Females, ensuring apprenticeship in non-traditional occupations.	Incentive payment is paid to employers taking on females for apprentices in non-traditional areas ie. all apprenticeship industries (excluding hairdressing), as well as female chef trainees and technician cadets.	Subsidy of $22 per week paid to employers during the first 12 months of the contract ($1,040).	Payment in arears every 13 weeks, after veri- fication from employer that apprentice is still in employment.	Introduced 1 October 1984.
APPRENTICE BLOCK COURSE SUBSIDY (DOL)	Encourage industry groups to reform their apprentice- ship arrangements to the Government's standard.	Industry groups with apprenticeship arrangements which require reform.	Incentive payment to those industries which are engaging in the reform process.	Employer subsidy of $110 for enhanced rate following reform of agreed criteria and $60 interim rate pay- able to all trade until December 1987.	Payment of subsidies devolved.	Introduced 1 January 1985. Deadline for enhanced rate 31 December 1987.

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